

GOLF COURSE NEWS

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U.S. first-half activity: 1990 vs 1989

	1990	1989	Difference
Open	129	159	-30
Under construction	570	375	+195
In planning	684	416	+268
Totals	1,383	950	+433

Source: NGF

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Fazio repeats as best designer

By Mark Leslie

Tom Fazio, whose stock continues to rise, has repeated as Golf Course Architect of the Year for 1990.

Fazio, with offices in Hendersonville, N.C., and Jupiter, Fla., received 31 percent of the votes cast in *Golf Course News'* second

annual survey of the nation's architects.

Rees Jones of Montclair, N.J., finished runner-up for the second straight year, with 21 percent of the vote. Jay Morrish of Tulsa, Okla., who designs courses with ex-Tour pro Tom Weiskopf, received 19 percent and placed

third.

"It's just sensational what's happening in golf, and the kinds of golf courses and products being done," Fazio said. "The competition level in golf is so high. The desire for quality, dramatics, sensational, tremendous golf is out there and it's an exciting

time."

Asked if 1990 was his best year, Fazio said: "Maybe in terms of five spectacular sites." Yet he raved about the courses that will be completed this year.

"I have a site in Michigan (Treetops Golf Course) that

Continued on page 19



A Fazio 1990 creation

Indwelling the hills of his hometown of Hendersonville, N.C., is Tom Fazio's Champion Hills golf course.

This is a view of the 13th hole from the elevated tees before the tees were seeded. America's top golf course architect for 1990 will live in and be part owner of Champion Hills. For more information on course development, see pages 19-22.

Photo by Jan Beljan

Cadenelli to be 'Education President'

By Peter Blais

The Education President. It's a title many want, but few deserve. Stephen Cadenelli is one of the few.

The incoming president of the Golf Course Superintendents Association of America

wanted to be a teacher when he graduated with a bachelor's degree in education in 1970.

But teaching jobs were scarce 20 years ago. So when several months spent pounding the pavement of

academia led nowhere, Cadenelli followed the asphalt to Greenock Country Club in Lee, Mass.

The head superintendent at Greenock was Peter Solinelli, Cadenelli's fellow co-captain from their days on

the local high school football team. Solinelli hired his former teammate as his assistant.

"Initially, I was just filling in" remembered Cadenelli, who was promoted to head

Continued on page 13

Muirfield best conditioned, say pros

From staff reports

Muirfield Village Golf Club in Dublin, Ohio edged out Butler National Golf Club of Oak Brook, Ill. as the best-conditioned course on the

professional tour in a recent *Golf Course News* survey of 30 touring PGA and LPGA players.

Muirfield, site of the Memorial Tournament in early May, received 13 first-place votes.

Butler, for years the host of the Western Open, was the choice of 11 players.

Westchester Country Club (Westchester Classic) in Rye, N.Y. garnered two votes.

Polling one apiece were Glen Abbey Golf Club (Canadian Open) in Oakville, Ontario; Champions Golf

See related story, page 16.

Club (Nabisco Championship) in Houston, Texas; Castle Pines Golf Club (The International) in Castle Rock, Colo.; and Pleasant Valley Country Club (Bank of Boston Classic) in Sutton, Mass.

"Muirfield is by far the best year in and year out," said tour professional Scott Verplank of the Desmond Muirhead/Jack Nicklaus-designed course.

"Muirfield's always the best," added Kenny Knox.

Continued on page 38

Tax abatement saves clubs thousands

By Peter Blais

The National Club Association claims it saved tax-exempt clubs thousands of dollars in penalties by intervening with the Internal Revenue Service in the U.S. Supreme Court's Portland Golf Club v Commissioner of Internal Revenue case.

The savings for an average club with a \$10,000 unrelated business income tax liability could be as much as \$4,500

Continued on page 33



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Isutani planning \$60M facility

Japanese developer Minoru Isutani last September had only to reach for his checkbook and pen in \$800 million to acquire the famed Pebble Beach and Spyglass Hill golf courses and properties in Monterey, Calif.

His next acquisitional stroke will be much tougher. He hopes to build a 355-acre, \$60 million private golf course and clubhouse in the Tujunga Wash.

Isutani's Los Angeles-based Cosmo World Corp., believes the Tujunga Wash, a flood plain just northwest of Sunland, offers several features considered crucial if its proposed Los Angeles International Golf Club is to attract a major tournament.

The proposed site is within the city limits of LA, is relatively flat, ideal for galleries, close to the Foothill Freeway and has an access road, Foothill Boulevard.

It also would look good on television. The course site lies in the flat plain below a wedge of the San Gabriel Mountains that would serve as a golf backdrop.

Biggest hurdle may be environmental and flooding concerns. Cosmo must spend several million dollars more than planned. The slender horned spine flower, which grows in two sections of the wash, is on the federal government's endangered species list.

Cosmo spent more than \$1 million to redesign the course to keep the fairways a safe distance from the plants. Cosmo sees flood damage control as a major public works and safety project. It would build a \$15 million channel that would run across the northern part of the wash.

If all goes well, Cosmo would begin building the course in April. Construction would take about 15 months and opening would be in the summer of 1992.

Cosmo paid \$2 million, or \$5,500 an acre, to the Mary Akmadzich family trust, and obtained 130 acres from CalMat Co., a cement company, by swapping an equal amount of land owned to the west of the wash.

Isutani also hopes to develop a golf resort near Las Vegas, Nev., and is co-developing one along the Kona Coast in Hawaii. His affiliated companies in Japan own 13 golf courses.

Palm Springs eyes hall of fame

Plans for construction of an 18-hole golf course, golf hall of fame, resort hotel and performing arts center have been submitted to the Palm Springs, Calif., City Council.

The project offered by SENCA Real Estate Development Co. of Ft. Worth, Tex., would take about 10 years and cost \$700 million.

Once the only destination in the Coachella Valley desert, Palm Springs now must compete with such growing resort areas as Rancho Mirage, Palm Desert, Indian Wells and LaQuinta.

Fort Mojave Indians cash in on \$4B project

LAUGHLIN, Nev. — A \$4-billion project that will create a small town and make the Fort Mojave Indian tribe rich, is planned by a half dozen developers eight miles south of here.

The Fort Mojave Indians are leasing 4,000 acres and extending their water rights to the Colorado River in Nevada to developers McMillan, Movada, Temple Development, Calmark, American Land and Helen Marie Davis. They, along with the project manager, Diversified Turnkey Construction Co., plan over the next 15 years to build 17,000 living units,

two schools, four golf courses, a water theme park and 11 casinos.

The project, called Aha Macav ("people who live along the water"), will be the biggest land-lease project on Indian land in the country. Since tribal land cannot be sold, the land is being leased to the developers for 75 to 90 years. Homebuyers, in turn, lease the land.

The 850-member tribe will get money up front, 55 percent of all profits from subleases, and will keep 5-1/4 percent of the taxes on gaming at the casinos.

Tribal Chairman Nora Garcia told

the Las Vegas Review-Journal the tribe wants to better educate its members and build a hospital because the nearest one is 70 miles away.

She said: "I've never felt our tribe was ever exploited. We're doing something that has never been done throughout the country. Those who haven't developed elsewhere, I can see where they are concerned."

The lease requires tribal members be given first priority to jobs, if qualified, Garcia said.

The tribe's reservation extends through Arizona, Nevada and California. It has rights to take 12,000

acre feet of water from the Colorado River in Nevada, but because none of its members live there, it does not use those rights. That amount of water could serve 40,000 people in the development.

The developers plan 80 percent affordable housing — costing between \$45,000 and \$65,000 — in the project. Most transportation will be by bicycle or magnetic tram, according to Diversified Turnkey's John Clark.

Government red tape, which slows developments on federal land, is expected to slow the project's progress.

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GCSAA announces annual honors

*Jackson, Matthews, Roberts
named for service award...*

Three men will be honored for dedication and outstanding service to golf course superintendents and the golf community on opening day of the 62nd International Golf Conference and Show Feb. 5-12 in Las Vegas.

Distinguished Service awards will go to Dr. Noel Jackson, plant pathologist at the University of Rhode Island; W. Bruce Matthews, golf course architect, Grand Haven, Mich., and Dr. Eliot C. Roberts, Pleasant Hill, Tenn., the past eight years executive director of The Lawn Institute there.

Dr. Jackson has been a turfgrass researcher and educator at URI since 1965, when he moved to the United States from his native England.

His research and fungicide evaluations have produced a wealth of information on turfgrass patch diseases.

Matthews has been a GCSAA member for 56 years and has been

active with turfgrass research at Michigan State and Purdue universities. He designed and owns Grand Haven Golf Club.

Dr. Roberts founded The Lawn Institute after 28 years as turfgrass management teacher, researcher and administrator at universities in Massachusetts, Iowa, Florida and Rhode Island.

... while Schinderle's article chosen best

Gary Schinderle of Oakmont Country Club, Tex., will receive the Leo Feser Award Friday, Feb. 8, during the opening session of the 1991 International Golf Course Conference and Show in Las Vegas, Nev.

The award is for the best article written by a GCSAA-member superintendent and published in Golf Course Management magazine, and is named in honor of the pioneer golf course superintendent and GCSAA charter member.

Fraser, of Wayzata, Minn., died in 1976.

Schinderle's article, "Identifying and Correcting Severe Water Quality Problems," appeared in last May's issue of GCM. Schinderle related how he watched the turfgrass at his newly-constructed course sicken and die, and what he did to bring it back to life.

GCSAA's Turfgrass Student Essay Contest winners and their subjects were: first, Michael M. Boaz, Kansas State University, "Soil Modifi-

cation and Its Role In Integrated Pest Management;" second, V. Clay Cauthorn, Texas A&M, "The Changing Role of The Golf Course Within the Environment," and third, Amir Varshovi of the University of Florida-Gainesville, "Nitrogen Fertilizer and Groundwater Quality in Turfgrass Management."

Jose Ernesto Eguiza of the University of Guelph, Canada, and James L. Blackwell of Texas A&M received honorable mention.

Two private clubs ready to open in Ohio county

WESTERVILLE, Ohio — Two \$10 million private golf clubs will swing into operation next spring in southern Delaware County.

The Lakes Club north of Westerville is being played now, but won't be ready officially until March or April, according to head professional Steve Groves.

Wedgewood Golf and Country Club, also 18 holes, will open May 31, said Tom Cassidy, a partner in Day Brothers Development Co. Wedgewood is near Powell.

Ed Sneed designed The Lakes, Robert Trent Jones Jr. Wedgewood.

The Lakes Club will become the permanent host of the Bobby Rahal Columbus Charities Pro-Am.

Maui plan OK'd

Hawaii's Land Use Commission has granted conditionally Waihee Oceanfront Hawaii Inc.'s application to reclassify 131 acres of its 300-acre parcel near Waihee, Maui, for the golf course and clubhouse.

The commission told the developer, a subsidiary of Sokan Hawaii Inc., to give a wider berth to archaeologically important sand dunes adjacent to the project. The company had asked the commission to allow it to landscape up to the 70-foot elevation line makai of the sand dunes. Making boundaries more restrictive than the 170 acres would jeopardize project profitability, a company spokesman contended.

Sokan, owned by the family of Japanese professional golfer Tommy Nakajima, has agreed not to disturb any Hawaiian burial sites found during construction.

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Water agencies cited for ending feud, cooperating

Southern California's dwindling water supply, roiled the past five years by a power struggle and at least one legal challenge, may see more cooperation.

The Metropolitan Water District of Southern California and the Imperial Irrigation District were honored at The Irrigation Association's International Irrigation Exposition and the National Irrigation Symposium in Phoenix, Ariz.

These long-feuding water agencies last year had signed an agreement expected to be a model for

other water agencies seeking more efficient ways to use water.

The association's prestigious National Water and Energy Conservation Award also was presented. The Environmental Defense Fund, a national organization in part responsible for creating a negotiating climate leading to the historic pact.

Metropolitan will pay Imperial about \$97 million to build conservation facilities in the agricultural district and another \$23 million for indirect costs over the first five years of the program.

Another \$2.6 million will be paid annually to cover Imperial's direct program cost.

Metropolitan will finance 16 conservation projects in the Imperial Valley and, in turn, will receive an estimated 106,100 acre-feet of water per year that would be saved.

The projects included automated control structures, concrete lining of earthen irrigation canals and new reservoirs. The conserved water will remain in the Colorado River and be available for Metropolitan to import into its service area through

its Colorado River Aqueduct.

Metropolitan provides water service to more than 14.7 million people in Los Angeles, Ventura, San Diego, San Bernardino, Riverside and Orange counties. Imperial delivers the Colorado River's water to agricultural users of about 500,000 acres of farmland in the Imperial Valley.

Carl Boronkay, Metropolitan general manager, said: "Implementation of this landmark water conservation endeavor between the farmers in the Imperial Valley and urban Southern California

exemplifies the growing role water management and conservation will play in meeting the state's water needs."

He added that Southern California loses dependable water supplies while the population is increasing at a rate of 300,000 per year.

Redhawk opening delayed

Developers of the 18-hole Redhawk golf course in Southern California want things just right, so opening won't take place until early 1991.

The course was completed some time ago. Decision to delay opening was based on infrastructure improvements not yet complete — and Mother Nature.

"The grasses have not established themselves as firmly as we would have liked," said Larry Heffner, senior executive vice president of Great American Development Co., developer of the course and surrounding 1,300-acre master-planned community off Highway 79 in the Temecula Valley area of southern Riverside County.

The 140-acre course was designed by Santa Rosa-based Golfplan/The Fream Design Group in conjunction with professional Mark O'Meara.

Farm seen as course site

APPLETON, Wis. — Developer Thomas Purdy hopes to build an 18-hole championship golf course here.

If an annexation petition is granted to enable servicing by the Appleton water and sewerage system, construction of the course and community development, located on the Purdy family's 1,237-acre Apple Hill Farms, will begin early this year.

Course completion is probable in 1993 or 1994. Cost is estimated between \$4 and \$5 million.

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Course design curriculum being developed

BY PETER BLAIS

Bud Lenz stares at the map in front of him and shakes his head.

Someone calling himself a golf course architect has sent him a routing plan with a hole that heads out 150 yards before taking an almost 180-degree U-turn back toward the tee.

"Some of the stuff that comes across my desk assures me there is a definite need for some sort of college curriculum in golf course architecture. You might expect something like this from a land planner, but not someone with a shingle out there reading 'Golf Course Architect,'" said Lenz, an associate designer with von Hagge Design Associates. The Houston-based architectural firm is trying to develop a golf course architecture college curriculum.

As the game's popularity has increased, so have the number of people calling themselves golf course architects, said Lenz. Where do these people get their training?

College landscape architecture programs, followed by an apprenticeship with an established architect, continues to be the primary training ground, Lenz said.

Architects Robert Muir Graves of California and Geoffrey Cornish of Massachusetts conduct occasional two-day workshops on course design.

Crittenden News Service, Inc. offers seminars, but they are aimed primarily at developers, Lenz said.

There is no college program designed specifically for golf course architects.

"We've worked with the people

Lakeover ready after remodeling

BEDFORD, N.Y. — The former Lakeover Country Club, sold in September, 1989, to a Japanese company for \$24.9 million, may be open for play this spring as a "world class" golf course.

Daiichi America Real Estate Corp. is putting several million dollars into course improvement without altering its original character, said project engineer Leonard Bibbo.

The work is under the guidance of a golf course construction consultancy firm owned by veteran South African golf professional Gary Player.

Improvements include moving several tees, siting new bunkers and altering the approach to and elevation of a number of greens.

Also planned is a new two-floor clubhouse of about 60,000 square feet that will replace the present 45,000-square-foot structure and overlook four fairways.

Tokyo-based developers Mitsui Fudosan Inc. and Kajima International Inc. plan an 18-hole golf course on 239 acres in Lincolndale, northern Westchester. The Japanese companies bought the Somers property in 1989 for a reported \$8.3 million.



at Texas A&M," Lenz said. "They have a good landscape architecture program. But like other programs, students don't learn the basics of good golf course architecture — things like distances between tees and greens or from the center of the fairway to houses.

"They can tell you what the mean

depths and widths of housing lots should be. But they have trouble working the golf in, even though they might be golfers themselves. They have to learn the relationship between golf and development."

The Houston firm took a step closer to its dream of developing a college curriculum this year. Japanese exchange student Hiroshi Kamezawa is helping the von Hagge staff compile pertinent information from periodicals and staff experience that will hopefully establish the basis for a college-level curricu-

lum.

"Most of the information we have is up in our heads," said Lenz. "We're trying to put it into a curriculum with Hiro. We want to set down on paper what's in his and our heads. It's going to be a long process."

It's much too early to tell whether what emerges from this exercise consists of one or two courses, a concentration in golf course architecture within a landscape architecture program, or an actual major in golf course architecture. But whatever happens will help.

"There's definitely a market for individuals trained in golf course architecture," said Don Austin, a Texas A&M landscape architecture professor.

Austin favors a masters- or doctorate-level program that includes course work within the existing landscape design program, student internships and practicing architects serving on advisory committees and as instructors.

"Designing a golf course is one of the best learning experiences a student can have," Austin said.

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Los Alamitos GC renamed, rejuvenated

CYPRESS, Calif. — Golf has returned to Cypress after its only golf course was shut down.

FJC U.S.A. Inc. bought the former site of Los Alamitos Golf Course in September. Renamed Cypress Golf Club, opening is anticipated early in 1992. The lengthened layout boosted par from 66 to 72.

Los Alamitos was closed in late 1987 by Hollywood Park Realty Enterprises, which had bought the course and nearby horse racetrack.

Cypress Development, a group of developers headed by Lloyd



ACQUISITIONS

Arnold, last spring bought the 298-acre property for \$71 million. This followed a ballot measure that allowed development of a 75-acre business park next to the race track. Citizens earlier had rejected two proposals for a much denser business park.

FJC U.S.A.'s acquisition was negotiated by Dye Equity Inc., a subsidiary of Denver, Colo.-based Dye

Design International.

Dye Equity has assisted Japan-based Fuji Country Co. Ltd. and FJC in efforts to expand their interest in owning and operating golf courses throughout the United States.

Fuji Country and affiliates own and operate Sonoma Golf Course in Northern California, Castle Creek Country Club in San Diego County and River Vale Country Club in New Jersey.

The company also has golf operations in Japan and other countries.

Coldwell Banker enters world of golf financing

PHOENIX, Ariz. — Coldwell Banker Commercial Real Estate Services, which claims to be the nation's largest commercial real estate firm, is banking on golf's future.

CBC has formed the Golf Properties Marketing Group, headquartered here, to help buy and sell golf property assets.

Roger Garrett, senior sales consultant, and Tom Harris, associate vice president, point out that the golf business is thriving and is forecast to continue very strong the

next 20 years.

The group will concentrate on assisting owners, including financial institutions, master planned community developers, and others market golf properties to an extensive list of buyers compiled the past two years.

CBC will also help companies and entities wishing to become more involved in the golf industry through acquisition of golf properties.

New York muni course to open in '92

The New York State town of Wallkill's \$6 million, 18-hole Windy Wes Golf Course, off Sands Road, will open in 1992.

Steve Esposito, golf architect of Hudson Engineering Associates, Goshen, said the 1992 opening would let the maintenance staff get accustomed to the golf course and permit course turf to grow and roots to strengthen.

Construction begun last April is almost complete. The 6,800-yard course has been sprayed with a liquid seed.

Projections for course financing have been off. Only about 40 houses have been built in developments, the result of a sharp downturn in the local economy. This created a shortfall of about \$175,000.

Public course patrons pick turf over flowers

Spare such special projects as building flower boxes and concentrate on improving course conditions, said patrons of the two public golf courses in Pekin, Ill.

Golfers met with Bob Blackwell, director of Parks and Recreation, to make known their views. They complained that tees and greens are poorly maintained.

Blackwell promised more rules, a better workforce, better course conditions, including the greens, and an improved driving range at Lick Creek.

Lick Creek recently was named by Golf Digest as one of the best 75 courses in the U.S., but there were complaints that the course needs tighter management and stricter rules, particularly in limiting where golf carts are allowed.

The \$825,000 budgeted for the two courses was termed by one complainant as a "phenomenal amount." Legality of the Park District in closing the course for special events also was questioned.

Biggest concern at Lick Creek is the greens, said Superintendent Steve Funk. Problems are related to their construction, which left a clay layer just below the surface that will not let the grass roots go deep enough, causing stress to the plants.

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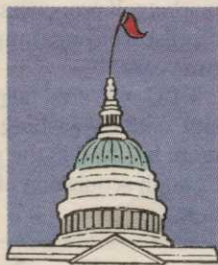
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Congress states benefits of turfgrass

The U.S. Congress, in its 1990 Farm Bill, recognized the environmental benefits of turfgrass sod.

Within the bill's findings, Congress stated: "Tree plantings and ground covers



such as low-growing dense perennial turfgrass sod in urban areas and communities can aid in reducing carbon dioxide emissions, mitigating the heat island effect, and reducing energy consumption, thus contributing to efforts to reduce global warming trends."

The Farm Bill's \$74-million funding for 1991 includes more than \$21 million for urban and community tree and turf planting and improvement efforts.

Bird watchers get their way

CHARLOTTESVILLE, Va. — Pen Park municipal golf course will have another nine holes, if not quite in the manner envisioned.

In approving the project, city council members said two holes must be moved away from the Rivanna River. They agreed with a group of environmentalists that a band of woods and meadows along the riverbank should be saved for bird watchers and walkers.

Golf course architect Bil Love said moving the holes "makes for an inferior golf course. The shift will affect the scenery, not the difficulty of the two holes." The holes may have to be shortened, and may cost more, Love added.

The \$1.5 million project could be finished by 1993.

'Knolls,' not 'Pits' in Illinois

Despite its setting, a proposed golf course on 160 acres of Williamson County, Ill., Regional Airport property won't be known as "The Pits."

Former golf professional Roy Glenn of Carterville, who wants to build an 18-hole course that would wind through coal strip pits, prefers the loftier "The Knolls."

At least \$1.2 million would be needed to embark on the project. Glenn said the rocky soil could be treated like the soils of desert courses. The hills, he added, would reduce the biggest nemesis golfers face—wind.

Work could begin next spring, with spring of 1993 the probable opening time.

Though the course would not be as long as many new courses, Glenn notes, "They're building too many courses for gorillas, not people."

Kentucky farmland will become Triple Crown CC

A 648-acre development will transform farmland in Boone County, Ky., into a \$42 million subdivision called Triple Crown Country Club.

Nine of an 18 hole course are complete, and 100 homes will be

offered in 1991.

The eight-year project will embrace small shopping centers, resort hotel and 1,500 homes.

Other area golf communities, where homes are integrated into or built around golf course design, in

the planning stages or open are Ivy Hills in Newtown, Royal Oak near Amelia, and Beckett Ridge, West Chester.

Hamilton Township trustees said a golf course development also is planned on Striker Road.

Triple Crown's interest in development is fueled by studies indicating that building one course per day for the next two years won't be sufficient because of the supply and demand of people wishing to play golf.

Watts finds a way to avoid long tee-time wait

MIDDLETON, Wis. — Jim Watts and wife Bonnie soon won't have to compete for weekend tee times at golf courses near their home.

Watts is building an 18-hole public course on his 130-acre sod farm

off Mineral Point and Pioneer roads west of Madison.

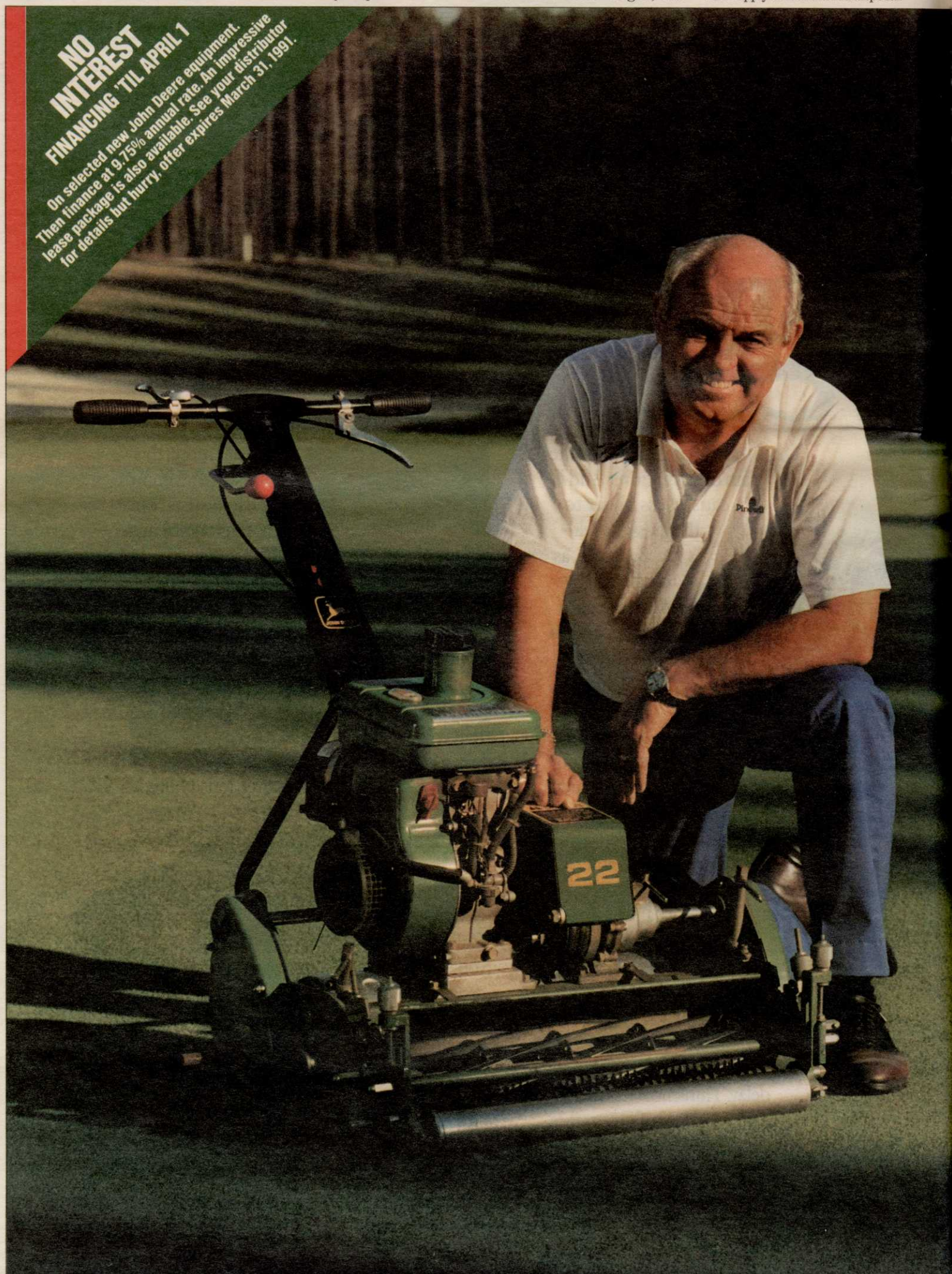
The par 72, 6,612-yard layout was designed by Art Johnson of the Madison Parks Department. Watts, who built a 159-yard par 3 hole be-

hind his home 15 years ago, originally thought he would build a self-designed four-hole course on the sod farm, but expanded that idea. He consulted Erv Graf, retired city of Madison director of golf, and

Johnson. At the moment, his land is just grass; full of rich topsoil and almost devoid of trees.

Because he is in the landscaping business, Watts said he has an unlimited supply of trees at his disposal.

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Grounds, turf management course in the works at Missouri campuses

LEE'S SUMMIT, Mo. — Longview and Johnson County community colleges are developing a Grounds and Turf Management Program.

The 64-credit-hour program is being designed to train students for employment and prepare those in the industry for pesticide certi-



fication testing given by the states of Missouri and Kansas.

Longview will offer three courses toward this associate degree in the next semester, starting Jan. 14. They are turf and ornamental pest management, business math and English composition.

People should contact the colleges for further information.

New Hampshire developer files for bankruptcy

WINDHAM, N. H. — Developer Ronald Ruggiero has filed for bankruptcy in connection with a 154-acre, 18-hole golf course he had been

building off Londonderry Road in Windham.

Selectman Betty Dunn said the golf course is far from complete.

Ruggiero in 1988 said he had invested \$1.2 million in the golf course, and sought tax abatements.

Salt Lake rec board OKs course despite equestrians

Despite opposition from a citizens' group, the Salt Lake, Utah, County Recreation Board approved a design for a \$7.5 million golf course in Dimple Dell Regional Park.

A report by golf course architects A/E Intra Group-Bradford Benz describes the 18-hole layout as providing diverse terrain, breathtaking views and a good variety of shotmaking requirements.

The plan allows for a nature center in the southeast corner of

the park and a system of walking and equestrian trails along the south and east perimeters of the course.

A series of aerial photos of the park from 1968 to the present shows a gradual increase in erosion and in the number of trails criss-crossing the hillsides.

Intra-Group spokesman Lynn Larsen said the plan selected would have the least impact on Fremont Indian sites identified along the north side of the park.

Golf course opponents say they'll continue in court their 3 1/2 year battle to maintain the 650-acre park as an urban nature preserve.

Pennsylvania public course opens in spring

Fox Chase Golf Course, in East Cocalico Township, Pa., will open in the spring as an 18-hole public course.

It will be carved from 140 acres of the 350-acre Triple G dairy farm owned and operated by the Arthur Graybill family.

Graybill said the families will continue to farm the balance of the land but are not interested in expanding at this location. The family consulted the John Thompson Golf Course Design and Construction firm of Phoenixville, Pa., and worked closely with Rodger Fry, a professional land surveyor and engineer.

Consultants from Pennsylvania State University said the land, off Church Street, between Denver and Reamstown, was perfect for a golf course.

Erosion control will be improved in the area because of three ponds placed to take advantage of the natural drainage, said Robert Roggenburg, chairman of the East Cocalico Township Planning Commission.

Rutgers' royalty at \$364,000

Rutgers University has received a \$364,000 royalty payment for sales of turfgrass varieties jointly developed with Lofts Seed, Inc.

Rutgers co-developed 13 of Lofts' proprietary turfgrass varieties: Princeton, Mystic, Ram I and 1757 Kentucky Bluegrasses; Palmer, Repell, Yorktown II and Diplomat Perennial Ryegrasses; Rebel, Rebel II, Rebel Jr. and Tribute Turf-Type Tall fescues; and Laser Poa trivialis.

This year's royalty check represents the 1989 production and sales of these varieties.

Royalties support turfgrass teaching and extension programs. They also perpetuate research and development of new and improved turfgrass varieties.

Pinewild's two simple secrets for better greens

The local PGA Section calls them the best putting surfaces in the state. Golfers simply know that their putts seem to roll better at Pinewild Country Club of Pinehurst, North Carolina. The secret? The expertise of Superintendent Bill Sessums—and the performance of his seven John Deere 22 Greens Mowers.

"Pinehurst No. 2 is in our backyard," says Sessums, "so the only way for us to compete is to make sure our course is in top condition. That's why we have USGA spec greens and why we mow with the John Deere 22s.

A split drive system in the John Deere 22 Greens Mower delivers better turning and tracking on the job.



"The 22s are the best walking greens mowers I've ever used. They track better than others and deliver an excellent cut. The reels and bedknives hold up well, and I love the Kawasaki engine for easy starting and quiet operation. We've had nothing but good results from them in the 1 1/2 years we've run them.

"The verticutters are also fantastic. We use them once a week, and they make a big difference. The spacing of the blades is better than you find on other greens mowers, and they don't take out too much grass.

"We also have three John Deere 2155 Tractors. For comfort, maneuverability, long life and quiet operation, there's nothing like them. Comparing our old tractors to these is like comparing a Volkswagen to a Cadillac."

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USGA women's panel nominates Beard

FARHILLS, N.J. — Ann Beard of Essex Fells, N.J., has been nominated as chairman of the Women's Committee of the United States Golf Association.

The announcement was made by Cynthia Foshay, chairman of the Women's Nominating Committee. Members of the Women's Committee will be confirmed during the USGA's 97th annual meeting, in Minneapolis, Minn., at the end of January.

Barbara McIntire of Colorado Springs, Colo., has been nominated as vice chairman.

Three new members of the Women's Committee were nominated also: Ann Henderson of Stratford, Conn.; Pat Johnstone of Dublin, Ohio; and Nancy Koustas of Dearborn, Mich.

Leaving the Women's Committee are Betty Richart of Ann Arbor, Mich., after 17 years of service, including the last two as chairman; Gretchen Dennison, of Girard, Ohio, after nine years; and Julie Madison of Jacksonville, Fla., after 11 years.

First appointed to the Women's Committee in 1981, Beard has been vice chairman the last two years. She was chairman of the Girls' Junior Committee from 1984 through 1988, and chairman of the

Women's Handicap Procedure Committee in 1985 and 1986. She is a member of Essex Fells Country Club.

McIntire has been a member of the Women's Committee since 1985. The U.S. Women's Amateur champion in 1959 and 1964, she is chairman of the Women's International Team Selection Committee, and has helped set up golf courses for several women's championships. She is a member of Broadmoor Golf Club in Colorado Springs, Colo.

NGF survey claims public courses raise \$232M yearly

JUPITER, Fla. — Local amateur golf tournaments raise some \$232 million a year for charity in the United States, according to a National Golf Foundation survey.

Another \$30 million is raised by the men's and women's pro tours.

In addition to such major national charities as United Way, Ronald McDonald House and the Special Olympics, primary beneficiaries of these charity dollars include scores

of local youth athletic programs, anti-drug campaigns and other civic organizations.

"It's been no secret that golfers contribute millions each year to both local and national charities," said NGF President and Chief Executive Officer Joseph F. Beditz. "Not until now, however, have we known just how big a number we were really talking about. It's a tremendous tribute to the game and those who

play it."

The survey shows that nearly half of America's golf facilities conduct at least one charitable golf event a year. Some 35,000 of these events are staged annually.

Public facilities host seven out of 10 of these events. On the other hand, \$6 out of every \$10 raised is from tournaments at private clubs.

It is also estimated that 3.6 million people participate each year.

Now, More Than Ever, T

Queen's Harbour ready to open

ATLANTIC BEACH, Fla. — Queen's Harbour Yacht & Country Club golf course, designed by Mark McCumber & Associates, is complete and will open in early spring.

Golf course superintendent Frank Sbarro has established the turf on the 7,012-yard, par 72 championship course, said J. Christopher Commins, senior vice president and project architect for McCumber.

Membership play and invited guests had the chance to preview the course in December on a limited basis.

"The Queen's Harbour Course was a particularly challenging design project from the standpoint of the unique peninsula surrounded by tidal marshes, with the Intracoastal Waterway to the east and Greenfield Creek to the west and the St. Johns River to the north," Commins said. "The holes wander through outstanding oak hammock, providing fairways that are framed by majestic oaks, pines and hickories. In several instances, the layout borders the wetland edge of the acreage, providing beautiful marshland views."

New 18s featured

"Great New Golf Courses," a 1991 calendar with photography by Mike Klemme, is on bookstore shelves nationwide. The 13-month calendar contains dozens of full-color photos of 26 of the most beautiful and challenging golf courses built in the United States in the last decade.

The calendar is published by Harry N. Abrams, Inc., of New York.

In this age of environmental concern, it's nice to know that there's an effective way to protect your turfgrass, trees and ornamentals against damaging pests without compromising the environment: CHIPCO® SEVIMOL® brand carbaryl insecticide. You see, not only does CHIPCO® SEVIMOL® control your worst turf enemies, it also protects trees and ornamentals against 86 troublesome insects.

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Pesticide firms create Sound Environment panel

NASHVILLE, Tenn. — The Specialty Pesticide Industry has formed an organization to better support the industry.

Responsible Industry for a Sound Environment, an autonomous standing committee within the National Agricultural Chemical Association, will act as an umbrella organization addressing the issues affecting the \$1.3-billion industry.

Key in this effort is the need for a unified voice to communicate the environmental health and safety benefits of the proper use of pesti-

cides, according to the organizers.

The organization was formed from a series of meetings composed of key basic manufacturers, formulators and distributors. A steering committee was elected and assigned the task of developing a strategy to preserve and enhance the quality of the specialty pesticide industry, both in its own eyes and the public eye.

"We are constantly bombarded by federal, state and local issues, regulations, legislation and misinformation," said Bill Liles of Ciba-

Geigy. "This constant attack on our industry has cost us all valuable resources. In most cases, our defense has been weak and poorly focused due to a lack of a central, coordinated effort. Because of this fragmented effort, we have formed RISE to contend with the challenges facing our industry."

"Our efforts will support the position that judicious use of pesticides can prove positive in the care, maintenance and protection of public health and property in the urban, suburban and industrial en-

vironment," said Allen Haws, of Mobay Specialty Products Group. It is our mission to be responsible to the public and support the industry."

The RISE membership drive has begun to seek industry support and create a large, strong entity that will have a voice of authority in the public and private sectors.

The organization will be a clearinghouse of information on specialty markets, and will dispense information to promote and expand opportunities for the industry.

Integral in the program is lobbying at all levels of government, an intensive education effort aimed at the public and end-user programs on proper pesticide use and handling.

Membership will consist of categories including basic manufacturers, formulators, distributors, end users, associations, media and equipment manufacturers. Those joining RISE before Jan. 31, will be given charter member status.

The RISE Communications Committee consists of Newton Royster of Ciba-Geigy, 919-632-7059; Owen Steven of Knox Fertilizer, 219-772-6275; Allen Haws of Mobay Corp., 816-242-2364; Joe Wolf of Fermenta, 216-354-4264; and Paul Mengle of Lebanon Chemical Corp., 717-273-1687.

The Environment Is Right.

Maples says more old clubs seeing need for remodeling

The new and the old in golf courses are co-existing nicely.

Although the spotlight has been on new course construction the past two years, hundreds of courses continue to implement remodeling plans.

Dan Maples, president of the American Society of Golf Course Architects, said: "Many older courses recognize the need to renovate their greens, tees, fairways and bunkers. The way to do this properly is to develop a master plan in conjunction with an experienced golf course architect."

In many cases, Maples said, the master plan is implemented over a three- to five-year period to spread out costs and minimize disruptions to players.

Greens chairmen, committee members and others responsible for maintenance and improvement of golf courses may obtain a free brochure on "Master Planning: The Vital First Steps in Golf Course Construction" by sending a stamped, self-addressed business envelope to the ASGCA, 221 N. LaSalle St., Chicago, Ill. 60601.

Japanese firm considering Wash. course

BELLINGHAM, Wash. — North Wilder Ranch Property, 580 acres adjacent to Cordata Business Park here soon may be the site of a golf course.

Such a project is high on the list of ideas being considered by the new owners, Caitac USA Corporation, a Japanese apparel manufacturing firm. The Trillium Corporation, which has held an option on the property, assigned the option to Caitac and will continue as master developers for a proposed residential community.

And now it's registered for control of the deer tick—the primary vector of Lyme disease. Yet, despite its proven effectiveness against pests, the low environmental impact of CHIPCO® SEVIMOL® brand means that all this control, economy and convenience does not come at the cost of compromising your responsibility to nature. Get all the facts. Call your turfcare chemicals supplier today.

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New year, new model for paper

Happy New Year and welcome to the 1991 model of *Golf Course News*! If you haven't noticed, there are significant changes in this issue — all in the design of the publication. This redesign is so that you can get more out of *Golf Course News*.

You will be getting quite a bit more from our editorial product in 1991. The features our editorial staff have planned will be informative and designed to help you do your job better. The features for 1991 are as follows:

January: GCSAA Conference Preview, Architect and Builder of the Year (1990)

February: GCSAA Show Issue

March: Equipment Report: Greens Mowers

April: Chemical Report: Pesticides

May: Equipment Report: Golf Cars

June: Special Report: Grounds Maintenance at 30 Top Courses

July: Turfgrass Report: Bluegrass Sod

August: Special Report: Golf Course Management Companies

September: Chemical Report: Specialty Chemicals

October: Equipment Report: Irrigation and Pumping Stations

November: Special Report: Architects and Builders

December: Special Holiday Report: "All I want for Christmas Is..."



C. von Brecht

What do superintendents want?

I'm pleased to report that the primary reason we're able to offer a stronger editorial

product is due to the significant planned increase in our advertising base.

We forecast an increase of approximately 130 advertising pages. This means at least 130 more editorial pages; timely and valuable information for your business reading.

This issue has some good information regarding the upcoming GCSAA conference in Las Vegas. The floor plan for the show and this issue's advertisers can be found toward the center of the issue.

Congratulations to the winners of our recent surveys ... The Fazio design team for best golf course architects; Wadsworth Golf Construction Co., the best builder of the year, and the winner of our newest survey for the best-conditioned PGA Tour course of 1990, Mike McBride of Muirfield Village.

Once again, thanks for all your support, and I wish you all a happy and prosperous 1991!

Charles E. von Brecht
Publisher

Making resolutions

New years bring new resolutions, re-resolutions, and "I'd-better-be-resolute-this-time-utions."

The golf industry could perhaps make a corporate resolution just as you and I make our own. Then, again, aren't we all part of that corporate body?

OK, let's resolve to:

- Continue to investigate methods of good land management, from pest management to disease control, wildlife protection practices, and runoff and ground water control. (Accolades to Pete Dye and others for their innovative designs at such places as Dye's Old Marsh and the Ocean Course at Kiawah Island.)

- Support the United States Golf Association's multimillion-dollar research effort into chemical use and its effects on turf management. (Thanks to the many who have given toward the initial \$3.8-million outlay.) More millions are needed, and the end result will benefit all segments of the industry, from the superintendent to the developer.

- Be less suspect and more understanding of "those dreaded nemeses" — the government agencies that regulate zoning, the environment and ecology. They're human, just as people in the industry are. (Outdoorsmen, including golfers, are on the staffs of these agencies. And U.S. Environmental Protection Agency Associate Administrator Lewis S.W. Crampton told the Golf Summit 90 crowd in



M. Leslie

November that "there are friends of golf" at the EPA. If so, let's find and nurture them.)

• Be straight with

the public, whether they be neighbors of a planned development or "environmentalists" itching for a fight. More than one architect have found that spelling out the problems, proposing solutions, and generally being bendable, are an immense help in public hearings and negotiations.

- Join those groups that have been opposing golf courses. Discover their real motives and their education on the issues. You may find many are simply misinformed, and when presented with the truths, will be supportive.

- Help give those non-golfing segments of America the chance to play golf. Many people lack the time, money or inclination to get out on the course and play the game. In the entire country there is only one course designed for the handicapped player, and that is by a hospital (Edwin Shaw in Akron, Ohio).

Greens fees are most often prohibitive for the young players. Hey, even eight bucks is a lot for a teenager. That young person would be the adult golfer of the year 2000 —

Continued on page 13

LETTERS

Designate ASGCA members in listing

To the Editor:

I appreciate and endorse the position that *Golf Course News* has found in the industry. The November issue, however, was disturbing because of the special listing that was published delineating golf course architects. I don't find it equitable or just to be listed with individuals who have not met the standards and requisites of the American Society of Golf Course Architects without somehow discerning the difference in the individuals.

Membership into the ASGCA requires that stringent criteria be met, and sponsorship by three existing members is mandatory. The list listed numerous individuals who have not and probably will never meet the requirements. Do you really think it is fair to those members of the ASGCA that have made commitments and sacrifices to earn the credential, to list them with individuals that have not been qualified accordingly? Don't you think that this credential should be added to discern the difference somehow?

I would hope that in the future you will not make the same mistake that was made in your November issue.

I would suggest that your publication might start monthly inter-

view or biographies of the qualified architects in this country.

Continued success with your outstanding publication.

Sincerely,
Craig Schreiner, ASGCA
Kansas City, Mo.

Ask superintendent for irrigation specs

To the Editor:

Another interesting issue — your *Golf Course News*, October 1990.

I am taking this opportunity to respond to the irrigation article on new products, "Let your fingers do the watering."

I am a golf course irrigation consultant with over 30 years in the irrigation business. Most of our projects are in the Southeast and Hawaii. We try to specify the control system to the user's request. The problem is, generally the owner doesn't have a superintendent on board when the system is designed and little input is given us on what to use.

My intent in writing this letter to you was to give you a feeling on how I took your comparison of the five major suppliers of computer-operated centrals. First, I strongly feel there are major differences in each. I do understand some of the major differences, but don't pre-

tend to be an expert in the operation of each. I am encouraging you to do this concept again in the near future. By making direct contact to each company, have them give you the most positive or advantage they have over their competition. A lot of misunderstanding is out there today as to what each one really will do.

The salesman, of course, says his will do everything that the other one will do.

I feel this is something that the industry really needs. It is a very important exposure.

Best wishes to you for a continuing good publication.

Sincerely,
Don K. Burns
Irrigation Consultant

Try high rates of potassium

To the Editor:

Your November '90 publication of *Golf Course News* carried an article on page 3 about the problem of lack of water for California courses. Ironically, the same issue also had articles on too much water in the Southeastern states.

Golf course turfgrass faces a multitude of problems and many of the more difficult for superintendents to address relate to STRESS (drought stress, heat stress, cold/winter stress, wear

stress, etc.). High potassium rates with a safe source such as sulfate of potash will help turfgrasses survive and recover from nearly all types of turf stress!

I am aware of several turfgrass research universities currently involved in work to determine the relationships between high potassium sulfate rates and reduced turf stress, but I would like to hear from superintendents about their "in the real world" experiences on this topic.

Sincerely,
Dan Nason
10703 West 124th St.
Overland Park, Kansas

Need single information source

To the Editor:

We are all sincerely enjoying your publication — except for the omission of my name from your list of golf course architects in November.

The sky's the limit for you, it would seem, since our industry is in such need of a publication like yours. In particular, we need so much more information on how certain areas are dealing with wetlands legislation, and with limited maintenance materials (chemicals, etc.).

I wish you continual good luck.

All the best,
Ron Prichard
The Woodlands, Texas

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Confusion over survey

The wording of a question caused confusion in our October survey of computer controllers for irrigation systems. The result was that cost projections by the manufacturers did not compare "apples to apples."

We regret the wording of the question. It read: "What would be the cost to install the system at a new golf course that has five weather stations, is 6,500 yards long and is on 125 acres."

Too many factors crucial to such an estimate were not included. Thus

the great variance in the answers given.

As was said by Philip S. Walter, The Toro Co. — Irrigation Division sales and marketing manager for golf irrigation: "No two installations are the same. So no two quotes are the same. Everything today is customized to your needs, what you want and how you want to run it ... and what alternatives are available."

We suggest that superintendents considering a purchase contact the manufacturers directly for quotes.

Helbling dies at 58

OHIO TOWNSHIP, Pa. — William F. Helbling, operator of Green Valley Golf Course here, died at the age of 58 on Oct. 12.

Helbling had managed the course for 40 years.

He was a past president of the Western Pennsylvania Golf Course Superintendents Association, past chairman of the Ohio Township Planning Commission, a Eucharistic minister at St. Teresa Church in Ross, and active in civic activities.

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F. Copies not distributed		
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2. Return from news agents	none	none
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Shaw takes over GCSAA administration

Joyce Shaw is the new director of administration for the Golf Course Superintendents Association of America, Lawrence, Kan.

Shaw formerly was assistant manager of human resources for Sallie Mae, a student loan servicing center in Lawrence. Shaw also was adminis-

trative officer at the Sunflower Army Ammunition Plant in DeSoto, Kan., from 1984 to 1988 and from 1978 to

1984 was project assistant for the Army Corps of Engineers at Clinton Lake, near Lawrence.

More architects

Four golf course architects and one builder were omitted from November's listings.

The builder is Aldridge Niebur Golf of 1081 Indianwood Road, P.O. Box 5, Lake Orion, Mich. 48035.

One of the architects is Ron Prichard of 10600 Six Pines Drive, Suite 421, The Woodlands, Texas 77380.

Another Halsey Daray Golf of 9001 Grossmont Blvd., La Mesa, Calif. 92041-4084.

The third is Ted McAnlis of P.O. Box 14724, North Palm Beach, Fla. 33408.

The fourth is Gene P. Hamm, 8417 Patrick St., Raleigh, N.C.; 919-847-4696.

Comment

Continued from page 12

if he could afford to play in 1991.

A panel at the summit told how women golfers are treated like second-class citizens at some golf courses. Not encouraged to return, they don't; and they don't, in record numbers.

- Hold a summit at which people actually resolve the issues and plan actions to tackle them.

- Continue to prayer breakfast, in some fashion or other, at the GCSAA's International Golf Course Conference and Show. Contact John Ebel, of Barrington Hills (Ill.) Country Club, who is bowing out after a decade of arranging very successful breakfasts. Last year's drew 200 to 300 people.

Too many of us too often want to look at ourselves through rose-colored glasses, yet scrutinize our neighbors with a magnifying glass. Being judgmental too often comes right back at you. The expression "what goes around comes around" is truth.

We at *Golf Course News* will continue to strive to keep the industry abreast of happenings around the country in an unbiased manner. We will try to see all — even ourselves — through a magnifying glass.

In this issue we instituted a redesign to better organize the news. Please let us know how you feel about it.

Introducing a smoother rake at a smoother price

Notice anything different about Tour Smooth™, the new and affordable bunker rake from Standard Golf? We'd be surprised if you didn't. It's the all-American answer to Canada's popular Accuform. And a much better buy! ♦ Tour Smooth rakes are based on our long-

It's the perfectly affordable tool for raking sand into perfect playing condition!

lasting, hard working Duo-Rake, yet feature shorter teeth and a curved 15", high-impact, molded plastic head.

As the teeth rake the sand into place, the curved head follows behind, automatically leveling all those little ridges. Add our sturdy fiber-glass or aluminum handles, and you'll have a smoothing tool that

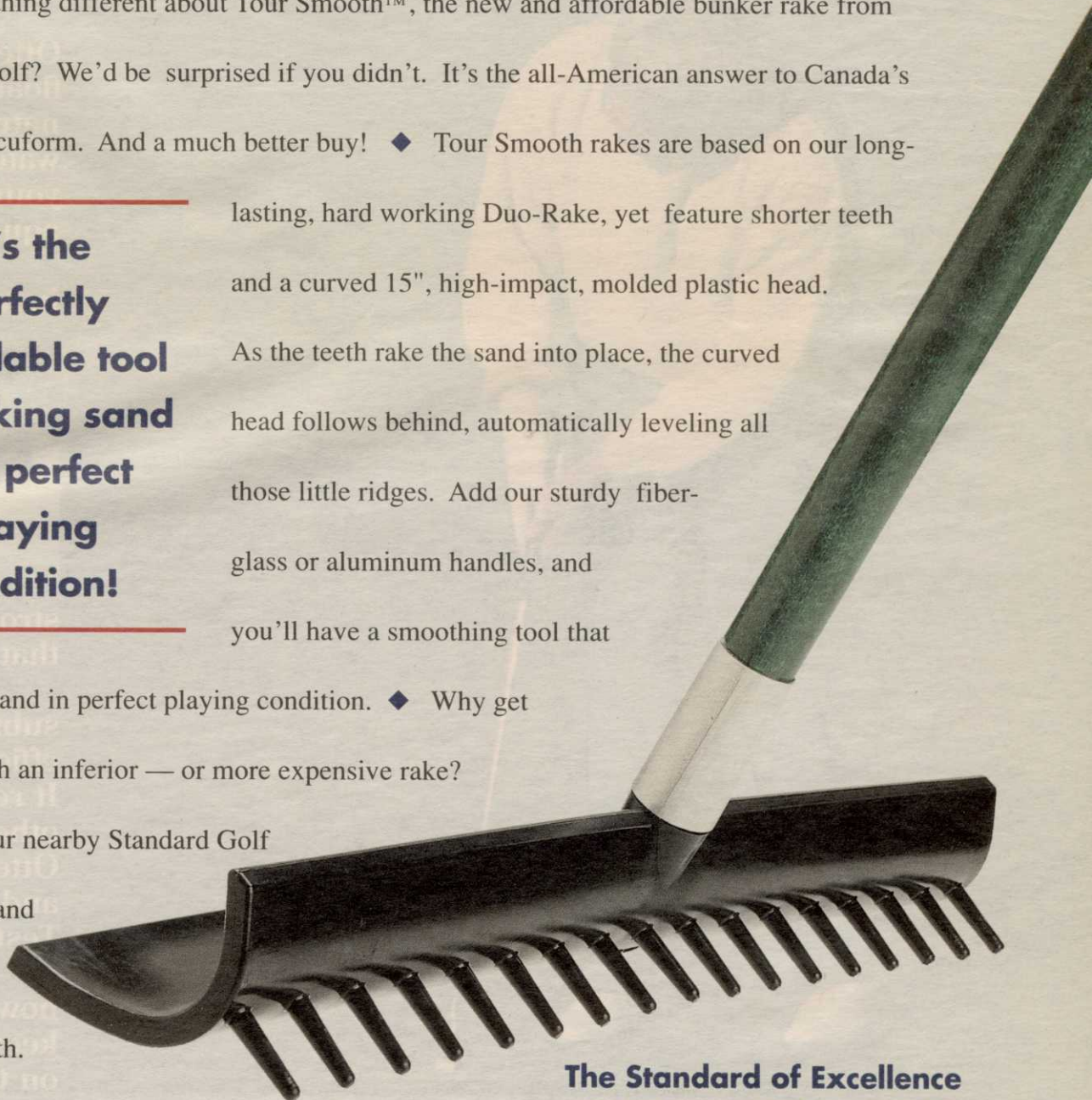
leaves the sand in perfect playing condition. ♦ Why get trapped with an inferior — or more expensive rake?

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On a golf course the green should be only for putting.

When water quality isn't up to par, algae and sludge can quickly turn your golf course waterway into a greenish, foul-smelling eyesore.

What's more, when water is not managed properly in irrigation ponds, algae can actually travel through irrigation pipes and start growing on the course itself.



The TRITON Otterbine subsurface floating aerator gives nature a boost, simulating natural water cleanup processes to keep your waterways clear of foul odors, aquatic weeds, and algae.

The TRITON, designed to work in architectural and conservative

settings where no enhanced water features are desired, is virtually undetectable as it creates a

strong current to produce oxygen that cleans and purifies your water.

This high performance subsurface aerator is extremely efficient, compact and self-contained. It requires no external pump or other costly fixtures, and, like all Otterbine Aerators, is safety tested and approved by the Electrical Testing Laboratory.

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Briefs



DISTINGUISHED SERVICE

The Wisconsin Golf Course Superintendents Association presented James M. Latham of the USGA Green Section with the WGCSA's Distinguished Service Award.

Latham, director of the Section's Great Lakes Region, is only the eighth person to receive this award, which was presented by WGCSA President Rod Johnson of Sheboygan Pine Hills Country Club.

USGA NAMES ZIRPOLI

FARHILLS, N.J. — Anthony J. Zirpoli Jr. is the new director of public golf for the United States Golf Association.

He replaces Eric Shiel, who retired in September.

Zirpoli, who joined the USGA in 1980, will remain director of regional affairs and amateur status.

Zirpoli will bring a distinct regional emphasis to the public golf program. The USGA's regional affairs managers will work closely with the Public Golf Committee and with regional and local golf associations.

James Farrell, regional affairs manager in the North Central region, will assume Zirpoli's former duties as Northeastern regional affairs manager.

NEBRASKA'S REARDON HONORED

Dr. Terry Riordan of the University of Nebraska was presented Seed Research of Oregon's annual Excellence in Research award for his contributions to the turfgrass industry.

Riordan has contributed to the improvement of many turfgrass species, including St. Augustine grass and Kentucky bluegrass. His recent emphasis has been on breeding low-maintenance buffalograss.

As part of this program he, with the assistance of graduate students and fellow turf researchers at UN, also performed basic research on drought avoidance by turfgrasses, rooting studies, studies on how important characteristics are inherited, and propagation methodologies.

The Marketing Excellence Award at the annual distributors' meeting went to the Hatfield, Mass., firm of Agriturf, Inc. Agriturf was cited for promoting new turfgrass products and supplying customers with accurate technical knowledge.

HAGCSA GETS DONATION

Mid-America Industrial Equipment has donated \$1,000 to the Heart of America Golf Course Superintendents Association Scholarship and Research Fund.

The donation resulted from MAIE's John Deere Golf Tournament held at Liberty Hills Country Club.

MOVES IN PENNSYLVANIA

Superintendent Jeff Lansdowne has moved from Pocono Farms Country Club in Tobyhanna, Pa., to Wooloch Springs Country Club.

Lansdowne was replaced by Doug Davis, who left Riverton Golf Club.

Ron Garrison has left Lords Valley Country Club in Gouldsboro, Pa., for a post at Center Valley Country Club.

GCSAA candidates ready for vote

The Golf Course Superintendents of America will elect officers on Feb. 12 at the association's annual meeting during the GCSAA International Golf Course Conference and Show in Las Vegas, Nev.

Steve Cadenelli of The Metedeconk National Golf Club in Jackson, N.J., this year's vice president, is uncontested in his bid to succeed Gerald Faubel of Saginaw (Mich.) Country Club.

Nominees for vice president are Randy

Nichols of Cherokee Town & Country Club in Dunwoody, Ga., and William R. Roberts of Lochmoor Club in Grosse Pointe Woods, Mich. Roberts is currently secretary/treasurer.

Three candidates for director will be elected for two-year terms. The four nominees are Gary T. Griggs of Shadow Glen, The Golf Club in Olathe, Kan.; Charles T. Passios of Hyannisport Club in Hyannisport, Mass.; Gary D. Sayre of Overlake Golf & Country Club in

Medina, Wash.; and Bruce R. Williams of Bob O'Link Golf Club in Highland Park, Ill.

Current President Gerald L. Faubel of Saginaw (Mich.) Country Club will continue to serve on the board of directors for one year as immediate past president.

Two board members have one year remaining on their terms. They are Joseph G. Baidy of Acacia Country Club in Lyndhurst, Ohio, and Randall P. Zidik of Rolling Hills Country Club in McMurray, Pa.

Vice presidential contenders — Nichols and Roberts

Name: Randy Nichols

Age: 43

Course: Cherokee Town & CC, Dunwoody, Ga.

Former head superintendent at: Construction superintendent at Willow Springs CC and Brookfield West CC, Atlanta

Years GCSAA Member: 15

GCSAA positions held: Member board of directors (since 1986); chairman tournament, conference and show, government relations and membership committees; vice chairman public relations and scholarship and research committees

Other associations: Past president Ga. GCSA; past vice president Ga. Turfgrass Assn.; member Ga. State Golf Assn. Advisory Board and nominating committee Ga. Golf Hall of Fame

Education: Bachelor's degree in turfgrass management from Mississippi State University

Family: Wife, Jan; children, Gina, 19, Greg, 18

Goal: "Superintendents have always protected the environment. But because we use pesticides, we've been accused in the past of not being environmentalists. It's important the public understand what we do and that we are pro-active when it comes to protecting natural resources. I want the GCSAA to continue offering education that will make superintendents even more protective of the environment and let the public know what we're doing."



R. Nichols

Name: William R. Roberts

Age: 38

Course: Lochmoor Club, Grosse Pointe Woods, Mich.

Former head superintendent at: Sentryworld, Stevens Point, Wisc.; Knollwood Club, Lake Forest, Ill.; Stevens Point CC

Years GCSAA Member: 15

GCSAA positions held: Secretary/treasurer (1990); member board of directors (since 1986); member of public relations, standards, scholarship and research committees

Other associations: Past president Wisconsin GCSA; member Michigan & Border Cities GCSA

Education: Certificate in turfgrass management from Pennsylvania State University

Family: Wife, Patricia; children, Jennifer, 12, Megan, 10, Erin, 8

Goal: "I would like to continue representing an association that has seen significant growth. That growth is a reflection of the members. There's a lot more room for improvement in the areas of education and the environment. I hope to take advantage of this opportunity to help the association improve even more in those areas."



W. Roberts

Board hopefuls — Grigg, Passios, Sayre and Williams

Name: Gary T. Grigg

Age: 49

Course: Shadow Glen GC, Olathe, Kan.

Former head superintendent at: The Lodge of the Four Seasons, Lake of the Ozarks, Mo.; VP of construction and maintenance, Kindred Management Co.

Years GCSAA Member: 20

GCSAA positions held: Member board of director (since 1988); chairman scholarship and research committee; member certification, tournament, membership, nominating and public relations committees

Other associations: Former member board of directors of Heart of America GCSA; member Kansas Turfgrass Foundation, Missouri Valley Turfgrass Association and Texas Turfgrass Association

Education: Bachelors degree in entomology from Utah State University; masters in agronomy from Michigan State Univ.

Family: Wife, Coleen; children, Jill, 24, Jared 22, Aaron, 17, Ryan, 10

Goal: "We have to provide more in the way of education, particularly concerning the environment. Education has been and always will be the cornerstone of the GCSAA. We have to educate our members about golf's affect on the environment, where golf is headed and how to take a pro-active stance on environmental issues."



G. Grigg

Name: Charles T. Passios

Age: 33

Course: Hyannisport Club, Hyannisport, Mass.

Former head superintendent at: Cummaquid G C, Yarmouthport, Mass.; Middleton (Mass.) GC

Years GCSAA Member: 10

GCSAA positions held: Member board of directors since March, 1990; chairman public relations and publications committees; vice chairman certification and education committees; member teaching resource advisory and government relations committees

Other associations: President Cape Cod Turf Managers Association; vice president GCSA of New England; board member Massachusetts Green Industry Council; member United States Golf Association and Mass. Turf & Lawngrass Council

Education: Associates degree in agronomy from Essex Agricultural and Technical College, Hawthorne, Mass.

Family: Wife, Fran; children, Daniel, 4, Sara, 1

Goal: "My goal is to continue the progress the GCSAA has made in the last few years. The organization has come a long way in promoting education and in addressing environmental concerns. We need to take a hard look at what we're doing to and for the environment. We need factual information to justify the things we do. If we do something detrimental, we need to correct it. If what we do isn't harmful or it's beneficial, we should be able to continue and let people know it."



C. Passios

Name: Gary D. Sayre

Age: 40

Course: Overlake Golf & CC, Medina, Wash.

Former head superintendent at: Oak Brook G & CC, Tacoma

Years GCSAA Member: 15

GCSAA positions held: Member certification committee; worked with education and government relations committees

Other associations: Past president Northwest Turfgrass Assoc. and Western Washington GCSA; co-founder Pacific Coast Turf & Landscape Conference & Show.

Education: Bachelors degree in earth science and geology from Portland (Ore.) State University; associates degree in horticulture from Portland Community College

Family: Wife, Pam; children, Paul 11, Mark, 9

Goal: "My goal is to keep the GCSAA moving in the same, positive direction by encouraging the strong people we have in areas like education, government, public relations and our executive director.... We need to make a big push environmentally. We need to keep helping in research and promoting superintendents' awareness of how to tell people what it is we do and how it aids the environment."



G. Sayre

Name: Bruce R. Williams

Age: 40

Course: Bob O'Link GC, Highland Park, Ill.

Former head superintendent at: Head superintendent at Bob O'Link since 1979

Years GCSAA Member: 14

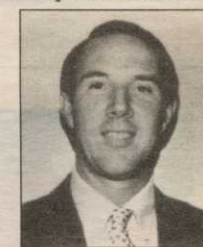
GCSAA positions held: Member certification, education, publication, scholarship and research committees; instructor GCSAA seminar on assistant superintendent functions and responsibilities

Other associations: Past president Chicagoland Association of GCS; member Chicago District Golf Association Turfgrass Research Advisory Committee and Chicago Botanical Garden Advisory Commission

Education: Bachelors degree in English and Speech, Baldwin-Wallace College, Berea, Ohio; graduate Turfgrass Management Program, Michigan State Univ.

Family: Wife, Roxanne; children, Blake, 9, Claire, 5, David, 2

Goal: "I want to continue my involvement in a service capacity to my peers to enhance their professionalism. I'm very concerned about the game's future because of regulatory and environmental issues. I believe in a pro-active stance on those issues. I'm also a firm believer in continuing education and have worked hard nationally and locally to promote professionalism through education."



B. Williams

McBride keeps Muirfield tourney-ready all year

By Peter Blais

Professional tournaments are fine. But a course shouldn't be graded simply on how it looks the one week a year when the Greg Normans and Nick Faldos come calling, according to Muirfield Village Golf Club superintendent Mike McBride.

(See related story on best-conditioned course — page 1)

"We try to peak the course for the Memorial Tournament in May," said McBride of his Dublin, Ohio, facility. "Then we try to maintain it at that level the rest of the year."

After all, that's what McBride would want if he were a local golfer. And he is.

"I try to play the golf course as often as possible. That's how you get the best perspective on maintenance. If you understand the game you get a better idea about playability. That way you can make sure the course is in the best shape as often as possible."

McBride, 36, started playing golf in nearby Worthington at age 11. He carried a 4-handicap while playing on his high school team.

He went on to Bowling Green State University, playing intramurals and local tournaments while pursuing a political science degree. But the seeds of his future profession were being sowed not in the classroom, but back home at Muirfield.

"I worked summers there when it was

being built in 1973 and 1974," McBride remembered. "That's where my interest in construction and maintenance started."

"I gave half serious thought to changing my major and going to a turf school like Ohio State or Michigan State. But I was so far along, I decided to see it through."

After graduation, McBride had several jobs, including selling pet products and marketing computer systems.

"But I decided that's not what I really wanted," he said. "I enjoyed my two summers at Muirfield. I decided to get back in the golf industry, somehow. I was married and it meant starting all over. But I wanted it."

"So I called Ed Etchells (Muirfield superintendent at the time and currently with Jack Nicklaus' architectural business). He recommended I come back to Muirfield."

Which is what he did. Starting as a seasonal laborer in the summer of 1982, he was offered a full-time position that fall. McBride made a commitment "to learn as much as I could." Management noticed and sent him to the Cook College two-year winter turf program in Rutgers, N.J.

McBride graduated in 1984 and was promoted to one of the two assistant superintendent posts. A year later he was made head superintendent.

As superintendent, a major responsibility



M. McBride

"We try to peak the course for the Memorial Tournament in May. Then we try to maintain it at that level the rest of the year."

is helping the television crews set up to cover the Memorial.

The installation of underground television cables over the past 15 years — Muirfield is one of the few courses nationally with such a system — keeps unsightly above-ground cables to a minimum.

Muirfield also provides its own camera towers, making scaffolding unnecessary. The 80 acres devoted to parking space during tournament week also falls under his surveillance.

"Basically, anything that comes on or near the course must come through me first," McBride said. "We try to minimize the amount of inconvenience for everyone — players, spectators, workers."

As for the course itself, tees, greens and fairways are planted in bentgrass with bluegrass and fine fescues in the fairways. All thrive in the Midwest climate and came through last December's record-breaking cold in fine shape thanks, in part, to an early

snow cover that helped insulate the turf, McBride said.

"In fact, we opened earlier than ever before last spring," he added.

McBride said his major maintenance headache involves some of the steep-faced bunkers that are susceptible to wash-out during heavy rains.

"Keeping clay out of the bunkers so they all play consistently is a continuous maintenance problem," McBride said.

McBride said he tries to keep abreast of environmental issues that are plaguing many new and existing courses. He keeps up-to-date records of chemical and petroleum use. Muirfield's underground storage tanks were recently inspected. Drainage studies are being conducted to avoid future problems.

"We try to keep up and anticipate where we'll be five to 10 years from now," McBride said.

McBride said he has no plans to leave Muirfield, especially with a new maintenance building and some modifications to the bunkers on the immediate horizon.

"I'm excited about what's going to be happening here over the next few years," he said.

When he's not at the course, McBride likes to jog and work out. He and his wife, Linda, who is in the antique business, collect antiques and wine. They're also busy raising 15-month-old daughter Kelsey.

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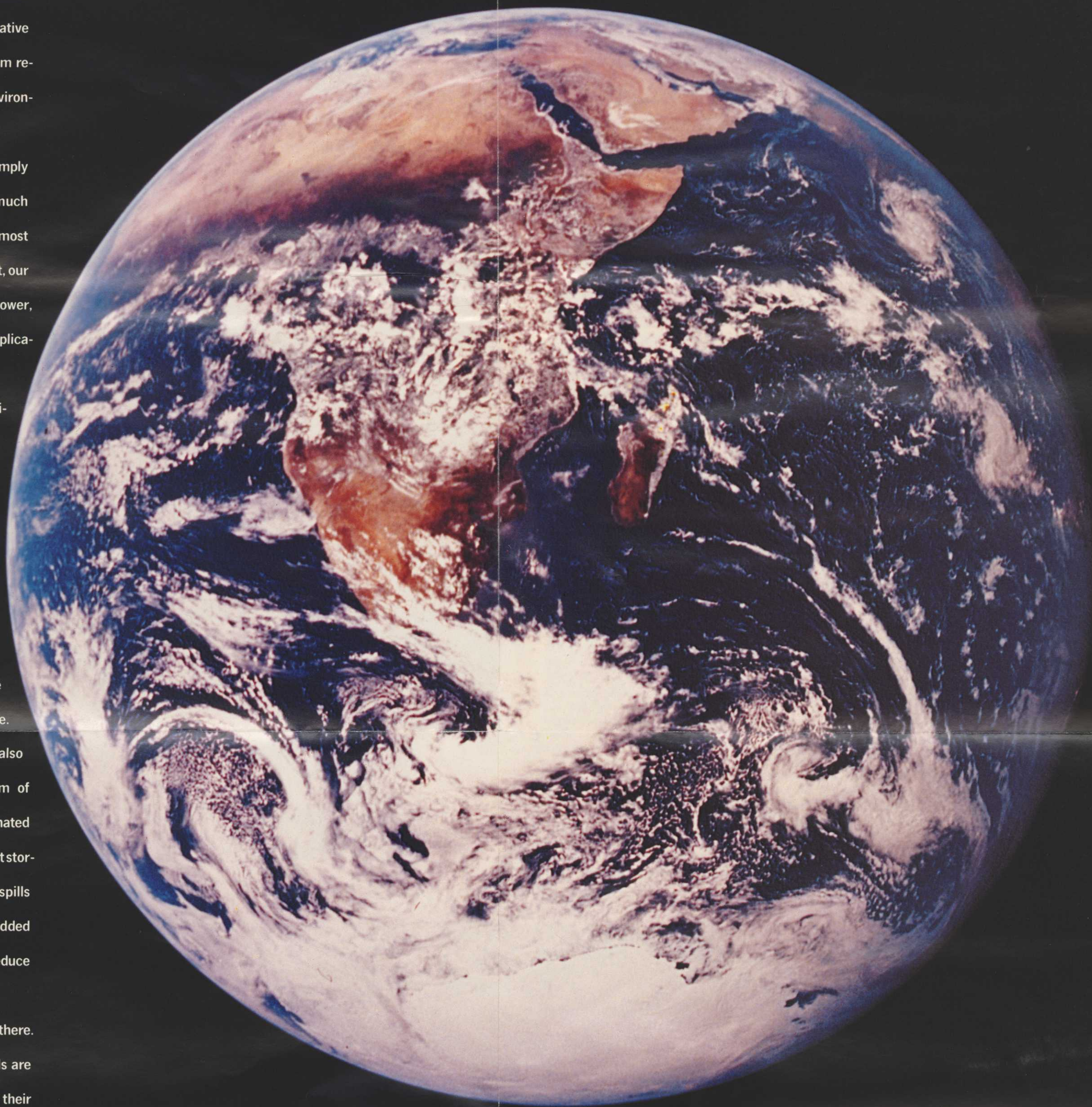
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North Central



MICHIGAN AND BORDER CITIES ELECT

Tom Mason of Birmingham (Mich.) Country Club is the new president of the Michigan & Border Cities Golf Course Superintendents Association.

Mason was elected along with Vice President Ken Debusscher of Wabek Country Club in Bloomfield Hills, and Secretary-Treasurer Gary Thommes of Red Run Golf Club in Royal Oak.

Directors are Jim Eccleton of Arbor Hills Country Club in Jackson, Jay Delcamp of Katke Cousins Golf Club in Pontiac, Mike Bay of Tam-O-Shanter Country Club in West Bloomfield, Steve Kolongowski of Tanglewood Golf Club in South Lyon, Carey Mitchellson of Country Club of Detroit in Grosse Pointe Farms, and Paul Kolbe of Maple Lane Golf Club in Sterling Heights.

The Michigan & Border Cities association donated \$5,000 to the Michigan Special Olympics in 1990, and raised another \$18,000 which it will give to the Michigan Turfgrass Foundation for research.

SOUTH DAKOTA AWARDS SCHOLARSHIP

University of Minnesota at Waseca student Arlen Fenhaus was given the first annual South Dakota Golf Course Superintendents Association Scholarship.

Fenhaus is majoring in landscape-nursery technology with an emphasis in golf course management.

Recipients of the award must be South Dakota residents and must enroll or be enrolled at UMW intending to study golf course management. Scholastic ability, leadership potential, community service and extra-curricular activities are also considered by the selection committee.

HAUSMAN TALKS OF RIGORS

South Dakota Golf Course Superintendents Association President Doug Hausman told the group recently about the rigors of construction during a very wet spring and a hot, dry summer at the new Dakota Dunes Golf Course in N. Sioux City.

Dakota Dunes is a Palmer Group course and will be a 36-hole facility with inclusion of the older Boat Club course. The new layout is designed for major tournament play and is expected to open late this summer.

WARREN RETURNS

Brett Warren has returned from Nebraska to South Dakota to assume the position as superintendent at Huron Country Club.

NEW NINES ADDED

While Hartford, Spearfish and Madison, S.D., have added nine holes to their existing nine-hole facilities, Huron may lose several of its holes to a planned airport expansion projects. Huron officials are planning to off-set this loss.

BENTGRASS SYMPOSIUM

A silver anniversary Wisconsin Golf Turf Symposium, dedicated to the memory of O.J. Noer, was held in Milwaukee in late October.

Sponsored by the Wisconsin Golf Course Superintendents Association and Milorganite Division of the Milwaukee Metropolitan Sewerage District, the symposium focused on

"Bentgrasses — New, Old, Right or Wrong."

Speakers included Tom Mascaro of Turf-Tec International, USGA Green Section Mid-Atlantic Region Director Stanley Zontek, and Pennsylvania State University Professor of Turfgrass Science Joseph Duich.

West



PGA WEST NETS \$38,450

Jeff Walser, head golf pro at PGA West Resort Courses in La Quinta, Calif., raised \$38,450 in the National Golf Day Pro-Am at PGA West last fall.

Half the money will be donated to the Inland Desert Junior Golf Association and half to PGA of America charities.

"All of us learned to play golf in junior programs when we were growing up," Walser said. "We know that the future of the sport depends on our ability to help today's junior players learn the game."

PGA West golf members donated \$14,000 for National Golf Day. Another \$24,450 was raised at a tournament at the Nicklaus Resort Course.

Walser said the Landmark Land Co. courses have raised more than \$100,000 in the last five years' National Golf Days.

The PGA of America presented Walser its President's Plaque at its annual meeting in December at La Quinta.

Northeast



NEW JERSEY LEADERS

The Golf Course Superintendents Association of New Jersey elected David Pease of Monmouth County Park System president at its annual meeting Nov. 13 at Hollywood Golf Club.

Pease is joined by Vice President Cris Carson of Echo Lake Country Club; Secretary Thomas Grinic of Tavasock Golf Club and Treasurer Martin Mantell of Rancocas Golf Club.

Directors elected to two-year terms are Glen Miller of Manasquan Country Club, Ken Krouse of Paramus Golf Club, Chris Gaynor of Colonia Country Club, and Robert Prickett of Pennsauken Golf Club.

Fulfilling their second year are Directors John Carpinelli of Moorestown Field Club, Paul Powondra of Princeton Meadows Country Club, Lawrence Dodge of Essex Fells Country Club, and Dave Mayer of Bowling Green Golf Club.

Commercial representatives to the board are Shaun Barry of Nor-Am Chemical Corp. and Steve Chirip of Lebanon Chemical Co.

Judy Policastro is executive secretary of the 64-year-old association, which has 450 members and is headquartered at 66 Morris Ave., Springfield, N.J.

MEGAWINNER

Former Rockport (Mass.) Golf Course superintendent Nick Bruni recently won \$5 million in the Massachusetts Lottery.

CONNECTICUT OFFICERS ELECTED

The Connecticut Association of Golf Course Superintendents has elected a new slate of officers led by President Thomas Watroba of Suffield Country Club.

Joining him as officers are Vice President Steve Rackliffe of Willimantic Country Club, Secretary John Streeter of Woodbridge Country Club and Treasurer Scott Ramsay of Cliffside Country Club.

Peter Lewis of Country Club of Farmington and John Motycka of Skungamaug River Golf Club were elected to two-year terms on the board of directors. Other board members are Bob Chalifour of Shennecossett Golf Course, Frank Lamphier of Aspetuck Valley Country Club, Phil Neaton of Black Hall Club, Peter Pierson of Pequabuck Golf Club, David Stimson of Tumblebrook Country Club and Stephanie Zanieski of Cadwell & Jones Inc.

The CAGCS awarded honorary membership to Don Kiley, executive director of the Professional Pesticide Users of Connecticut, at the annual meeting Nov. 5 at Old Lyme (Conn.) Country Club.

WEST VIRGINIA CONFERENCE

Five scholarships were awarded to highlight the first annual turfgrass and grounds management conference held by the West Virginia Golf Course Superintendents Association, in conjunction with the West Virginia University Extension Service.

WVGCS gave its first scholarships ever to Rodney Noel of Daniels, Elza O'Neil of Moundsville, Gene Boggess of Ravenswood, James Rhoden of West Milford and Keith Brooks of Vienna. Noel is in his second year at Penn State Turfgrass Management School. The others will attend the Ohio State Golf Course Management Short Course in January.

Mountains



PEAKS & PRAIRIES OFFICERS

The Peaks & Prairies Golf Course Superintendents Association is under new leadership under President Kevin Verlanic of the University of Montana Golf Course.

Verlanic was elected to replace Immediate Past President R. Scott Woodhead of Valley View Golf Club at the association's fall conference and trade show in Billings, Mont., in October.

Also elected were Vice President Todd Mumbauer of Butte Country Club, Secretary-Treasurer Joe Brinkel of Laurel Golf Club, and Directors Brad Berg of Olive Glenn Golf and Country Club, Peter Grass of Hilands Golf Club, Jon Heselwood of Stillwater Golf Club, Steve Johnson of Green Meadows Country Club, Doug Kremer of Big Sky Golf Club and Dean Krob of Pryor Creek Golf Club.

Southeast



GEORGIA CONFERENCE

Environmental issues and better turf management practices highlighted presentations at the 21st Annual Georgia Turfgrass Conference and Trade Show, Dec. 10-12, at the Georgia International Convention and Trade Center in Atlanta.

More than 40 scientists and professionals addressed the conference on turfgrass issues.

South Central



TENNESSEE CONFERENCE

Topics from DNA research in turfgrass to winter kill of Bermudagrass will highlight the Tennessee Turfgrass Conference and Show, Jan. 7-9, in Knoxville.

The first conference held in east Tennessee, the event is scheduled for Holiday Inn World's Fair and is being coordinated by the Tennessee Turfgrass Association, headquartered in Nashville.

Concurrent hands-on workshops on Jan. 7 are "Identifying Turfgrass Diseases, Insects and Weeds," with Drs. Alan Windham and Neil Rhodes, and Harry Williams; "Sprayer and Spreader Calibration," with Drs. Jim Wills and Tom Samples; and "Handling Pesticides Properly," with Dr. Gene Burgess.

The Tennessee Department of Agriculture will also offer a pesticide category exam and core exam that afternoon.

Jan. 8 will offer a full day of sessions, including Dr. Coleman Ward of Auburn University speaking on "Winter Kill of Bermudagrass"; superintendent Buddy Williams of TPC at Southwind in Memphis speaking on "Preparations for a PGA Tournament"; Dr. Joel Barber of Oklahoma State University on "New Bermudagrasses and Breeding"; Don Armstrong of Golf Resources in Dallas on "The Unforeseen Problems in Golf Course Construction"; and Tom Samples of the University of Tennessee on "Present and Future Turfgrass Pests."

Ward will give attendees highlights of Auburn University's turfgrass research on Jan. 9, followed by talks by Dr. Gary Wade of the University of Georgia on "Xeriscapes for Grounds Management"; Dr. Lloyd Callahan of the University of Tennessee on "DNA Research in Turfgrasses"; Barber on "Fertilization Strategies and New Product Formulations"; and Dr. Richard Duple of Texas A&M University on "Herbicides for Weed Control in Ornamental Ground Cover Beds."

More information is available from Donnie Callis, TTA executive director, at 533 Hagan St., Nashville, Tenn. 37203; 615-242-4600.

Superintendents associations and others are invited to send news stories to: *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

Cadenelli

Continued from page 1

superintendent when Solinelli left for a Vermont course several months later. "To be honest, I was a little bored that first year or two. I really wanted to teach."

"The first time I really got excited about becoming a superintendent was at a turf conference at the University of Massachusetts in 1972. I was amazed at the complexity of the business, the expertise of the researchers who spoke. That turned me on for life. I was intrigued that there was so much to it."

Cadenelli graduated from the UMass winter turf program in 1974 before moving on to Pequot Country Club in Stonington, Conn.,

the Country Club of New Canaan (Conn.) and eventually The Metedeconk National Golf Club in Jackson, N.J., where he has been the past six years.

But getting back to education, Cadenelli joined the GCSAA in 1972. He became a member of the Education Committee in 1979 and chairman shortly after winning election to the GCSAA board of directors in 1986. He also chaired the Certification Committee.

"One of my main concerns is increasing the professionalism of our organization through education," said Cadenelli. "I believe in education in all aspects of life. I'll be out there promoting education to our members and trying to upgrade the education of the people coming into the profession."

Cadenelli is a strong supporter of the GCSAA requirement that any superintendent



S. Cadenelli

certified in the year 2004 and beyond have a four-year college degree.

"You need more than just the technical training to be a superintendent. You need a much broader educational background to be a superintendent today," Cadenelli said.

"If people are going to view our group as professionals in the future, our members need four-year degrees. It's essential for a superintendent today to understand things like how the economy works and how it affects his golf course."

Cadenelli's other major concern is the environment.

"I want to continue to emphasize the work the GCSAA has done with the environment," he said. "We need to highlight ways the superintendent can better manage his course."

Cadenelli grew up across the street from Greenock Country Club. He didn't play golf until he was a sophomore in high school. He was the No. 3 player on his high school team. Over the years his handicap has ranged from 11 to 14.

He was secretary/treasurer of the GCSAA in 1989 and vice president in 1990. He is running unopposed for president.

GCSAA's '91 president

Name: Stephen G. Cadenelli

Age: 42

Course: The Metedeconk National Golf Club, Jackson, N.J.

Former head superintendent at: CC of New Canaan (Conn.); Pequot GC, Stonington, Conn.; Greenock CC, Lee, Mass.

Years GCSAA Member: 18

GCSAA positions held: Vice president (1990); secretary/treasurer (1989); member board of directors (since 1986); past chairman of education, certification, finance, communication awards, public relations and planning committees

Other associations: Member and past president Conn. Assn. of GCS; member GCSA of N.J., Metropolitan GCSA, N.Y. State Turfgrass Assoc., N.J. State Turfgrass Assoc.

Education: Graduate of winter turf school, Univ. of Mass.; bachelors degree in education, No. Michigan Univ.

Family: Wife, Linda; children, Tara, 20, Matthew, 18

Goal: "First, I want to continue to emphasize the work that's been done on the effects of golf on the environment while highlighting ways to better manage a golf course. Second, I want to promote the professionalism of our association by encouraging education."

Par Ex: Experts In Control

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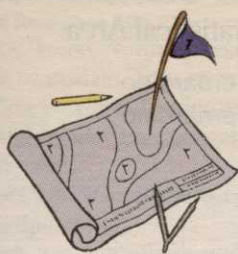
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Briefs



100 YARDS LONGEST HOLE

CANCUN, Mexico — One hundred yards is the longest hole on a new executive course that opened Dec. 6 at Melia Cancun, Melia Hotels' flagship property in Mexico.

The 2,500-yard course features 18 par 3 holes — all between 60 and 100 yards long. It is the newest amenity at the \$60-million, 448-room resort which opened last February on the Yucatan Peninsula's east coast.

The course will take approximately two hours to play, according to Jacques de Paep, vice president of sales and marketing for Melia Hotels of Mexico, and will be open only to hotel guests of the Melia Cancun and its sister hotel, the nearby Melia Turquesa. Greens fees will be \$10.

ANTELOPE HILLS ADDING 18

PRESCOTT, Ariz. — Antelope Hills Golf Course, a municipal facility, will add a second par 72 18 holes.

Play is scheduled in the summer of 1992.

Course architect is Gary Panks. Tim Gray is the head professional.

MCCUMBER DESIGNS MISSISSIPPI COURSE

HATTIESBURG, Miss. — The new 18-hole Timberton Golf Club course is on target for anticipated opening this summer.

Grassing of both nines and the practice range complex is complete.

Timberton is the centerpiece of a 460-acre semi-private country club community near the intersection of U.S. Highways 59 and 11, just south of Hattiesburg.

The Florida firm of Mark McCumber & Associates designed the course hewn from the 4,500 acres comprising Timberton. James Ray Carpenter, honorary president of the PGA of America, is director of golf.

DYE'S KIAWAH COURSE NAMED

KIAWAH ISLAND, S.C. — The Pete Dye-designed course that will host the 1991 Ryder Cup Matches in September has been named The Ocean Course at Kiawah Island. But Joe Walser, senior vice president of Landmark Land Co., which owns and operates all resort amenities at Kiawah, said this is one instance where a course, and not its developers, virtually named itself.

"It was a year-long thinking process," said Walser, explaining how The Ocean Course came to be named. "But when it came time to make a final decision, the natural drama of the site itself won out. Having the ocean right there — where you can see it and hear it throughout an entire round — is something truly unique in golf."

YOUNG SIGNS AT DOUBLE CREEK

Snellville, Ga. — Mike Young Designs of Watkinsville, Ga., has been named golf course architect for Double Creek Country Club here.

Construction will begin in January on the new 18-hole private course in Gwinnet County.

Young's design exploits native rock outcroppings to enhance the beauty and challenge of the 6,950-yard, par 72 course.

In addition to the course and adjoining clubhouse, the private club will feature four guest cottages. Membership will be limited to 250.

Wadsworth Construction voted #1

'Nobody does it better,' say golf course architects in national survey

By Peter Blais

There's a saying that goes something like an army is only as good as its sergeants.

That could also be true of Wadsworth Golf Construction Co., runaway winner of Builder of the Year honors for the second consecutive time in the *Golf Course News*' annual survey of architects.

Chairman of the Board Brent Wadsworth credits the presidents of the four regional offices for much of the firm's success.

"They all have similar characteristics,"

Wadsworth said. "They get along well with their employees. They build loyalty and trust in their work force. We're fortunate to have four such talented people running the various divisions of our company."

Wadsworth's NCOs are:

• **Paul Eldredge, Midwest.** A Pekin, Ill., native, Eldredge, 49, first joined Wadsworth when the company built the Country Club of Pekin in 1962. Eldredge worked summers before graduating from Southern Illinois University with an engineering degree. He

worked full-time as an irrigation specialist until 1983 when he was promoted to president of the Midwest office. He still consults on irrigation matters nationally.

• **Ion Shapland, Southeast.** The son of a Champaign, Ill. course owner, Shapland, 43, worked part-time summers before graduating from the University of Illinois and joining the firm full-time in 1970. He organized and became president of the Oldsmar, Fla., office near St. Petersburg that same year. "He re-

Continued on page 23

Architects: Cypress Point best in U.S.

By Peter Blais

Cypress Point fought off a determined challenge from Pine Valley to retain its title as the best-designed golf course in the United States in *Golf Course News*' second annual survey of golf course architects and builders.

Cypress Point, Alister Mackenzie's masterpiece along the rugged shore of Northern California's Monterey Peninsula, was listed among the top five courses in the country by 60 percent (27 of 45) of those responding.

Pine Valley, running through the sand barrens in the Philadelphia suburb of Clementon, N.J., was mentioned by 56 percent (25 of 45). The George Crump/H.S. Colt

collaboration moved past Donald Ross-designed Pinehurst No. 2 (N.C.), last year's runner-up.

Rounding out the top five were Pinehurst, Pebble Beach (Calif.) and Augusta National (Ga.), each listed by 33 percent (15 of 45).

"Cypress Point and Pine Valley are what we are returning to as architects," said Gregory Martin, director of golf course design with Ives/Ryan Group, Inc. of Downers Grove, Ill.

"We don't adhere to the designs of a lot of courses built the past few years. We should build maintainable courses that allow us to be stewards of the land rather than artists

that use land to paint with. Both Cypress Point and Pine Valley are good examples of that philosophy," Martin said.

While many mentioned Cypress Point and Pine Valley among their top five, others were avid fans of one or the other. Their choices seem to reflect the current 'playability' versus 'challenging design' debate.

"Cypress Point is pleasurable excitement," said Kansas City, Mo., architect Craig Schreiner. "Pine Valley is treachery at every turn. Pleasure is what golf is all about, more than challenge."

"Cypress breaks all the rules — back-to-

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Best architects

Continued from page 1

we're doing, 36 holes (Newport Coast) at Newport Beach, then Two Rivers Club at Governor's Landing in Williamsburg (Va.), one east of Charlotte on 17 miles of lakefront property (Unharrie Point on Lake Badin), 36 holes in Wrightsville Beach, N.C., (Porter's Neck Golf Course), and the Disney course next door to Pete Dye's (in Orlando, Fla.)," he said.

"All are going to be as good as those we've just done."

"It used to be a Golf Club in Tennessee (which will open this spring in Nashville), or a Caves Valley (under construction in Baltimore), came along once every five years. Not that the other ones were bad but they were either just real-estate development or there wasn't as much total priority given to golf itself... Now there's such a keen golf interest that it's just tremendous."

Fazio rated 1990 a "10" on a scale of 1 to 10. "And I can say it's a 10 because the courses are done. The courses for 1991 should be a 10, but we're still working on those. We've got to work just as hard. A 10 doesn't automatically happen."

"It's like with Shadow Creek (which opened last year in Las Vegas). When I was doing that I wouldn't have said it was a 10. The concept is for a 10, the program, the commitment, but I can't tell you how good it's going to be until it's done... In 1991 these are all 10s in terms of planning."

"The ones that are further along, like Treetops... I can almost guarantee that people will put it as one of the best I've ever done. The one at Williamsburg is in the clearing and development stages; and though it's the desire of everyone to build a 10, you have to work at it. We're at about a 7 now in the mid-part of construction. We're in the shaping and contouring and we're going to bring that up to a 10."

Besides Shadow Creek, Fazio last year opened Emerald Dunes in West Palm Beach,



One of Rees Jones' gems for 1990 is The Peninsula Club in Charlotte, N.C. This view shows the 155-yard par 3 — a peninsula hole "that has all kinds of

Photo by Nancy Pierce angles, so wherever they put the marker, it's going to be a different hole every day," Jones said. "It's a gorgeous hole."

Fazio rated 1990 a '10' on a scale of 1 to 10. The courses for 1991 should be a 10 but we're still working on those.'

Fla., Stonebridge Country Club in Aurora, Ill., St. Ives Country Club in Duluth, Ga., and Hunter's Green in Tampa Fla.

His newest creation is Champion Hills in Hendersonville, where he will live and be part owner.

"We sodded the whole course," he said. "It's a Wade Hampton type of site, only more dramatic in a lot of different ways — maybe less dramatic in some."

He said of The Golf Club of Tennessee, which will open in the spring: "No question, some people are going to think it's the best golf course we've ever done. It's so tremendous. It's a golf club — no housing, no development. We had 1,300 acres to work with and could put it anywhere. We had a stream running through it."

"The course looks like it's been there for 100

years. We sodded the fairways with Zoysia. With the natural trees, the creeks, the streams, the rock walls — you can't help but like it."

The Newport Coast course is on the ocean and "is going to be extremely dramatic and very sensational," he said.

Yet creating a masterpiece, Fazio said, "is no big deal. That's what we're getting paid for... More importantly, that's what they expect. We have to perform."

"And, of course, the golfers go out there and their expectation is so high... If you've gone to Shadow Creek or the Vintage or one of the others and then you came to one of our new courses and it didn't measure up, you'd say, 'What happened here, guys? Did you have to cut back? Didn't you work as hard?'"

Fazio said the pressure never eases.

"After 28 years of doing it, the pressure just keeps building and building. But it's fun. It's not difficult. We've got such tremendous clients with such tremendous interest in golf that it's great for the game," he said.

Fazio said he can't help criticism that he only does expensive or high-end courses.

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Best architects

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ready had streams, creeks, trees, contour, rocks and waterfalls.

"This day and age we have the resources to create that environment. Sometimes—talking about the environmental situations, (Shadow Creek developer Steve) Wynn said, 'Tom, I'm giving you a blank canvas here; you don't have any excuses."

Rees in second

Rees Jones agreed times — and golf sites — are exciting.

Jones is excited about The Peninsula Club, a private, 18-hole course on Lake Norman that opened in Charlotte, N.C.

"It has six holes across or parallel to the lake. It has fantastic vistas as well as holes," he said.

"We've got diversity of length, real good short par 4s, a 155-yard par 3 7th peninsula hole that has 14 tees and all kinds of angles, so wherever they put the marker, it's going to be a different hole every day. It's a gorgeous hole.

"And it has quite a finish because the last two are birdie holes."

Cited by his colleagues as an architect whose courses "will stand the test of time," Jones explained: "I believe in being a hands-on designer. I go to my courses a lot. I must have been at The Peninsula 25 times. The same with this new job (Golden Horseshoe) we're doing for Colonial Williamsburg Foundation.

"Before they seed a green I check it and we get the transit out. You've got to have a knowledgeable person going to the job before you finalize it, which is the time you can make change at no cost. You make sure it's

'We're having a ball right now.

We've got a lot of good clients, a lot of good sites, and it's a pretty exciting time for us.'

— Rees Jones

going to be playable and popular."

Jones said he is also building courses "so that the slightly misplaced shot doesn't get over-penalized. I'm containing a lot of shots in the playing area much like the old links courses did with the dunes. I'm using a lot of grassy hollows and grass swales around greens, which keep a ball... There are a lot of precipitous slopes behind the greens, and we've got a lot of pockets and hollows to keep the balls from going down those slopes."

Jones considers his courses "fun and visually exciting. We're having a ball right now," he said. "We've got a lot of good clients, a lot of good sites, and it's a pretty exciting time for us."

He has "3-1/2 great courses right now," he said.

In addition to the Golden Horseshoe, Jones is designing The Atlantic Golf Club in Southampton, Long Island, N.Y., and nine holes at Cherry Valley Golf Club in Skillman, N.J.

"At The Peninsula Club we've got the lake," he said. "At Colonial Williamsburg they gave us 260 acres of virgin timberland. The trees are so tall it's incredible and the valleys and ravines are spectacular. Then, in the Hamptons, it's a links-type course."

The work entails "three different styles on three different sites," he said. "One is water-oriented. One goes through massive vegetation. And the other is an open site where we're doing a lot of mounding and links features... At Cherry Valley near Princeton, where the open farm is, there's going to be

State	County	Metropolitan-Statistical Area
California	San Bernardino	Riverside-San Bernardino
	Riverside	Riverside-San Bernardino
	Los Angeles (North)	Los Angeles
	San Diego (North)	San Diego
	Santa Clara	San Jose
	San Joaquin	Stockton
	Shasta	Redding
	Sacramento	Sacramento
	Placer	Sacramento
	Adams	Denver
	Arapahoe	Denver
	Jefferson	Denver
Colorado	Middlesex	Hartford
Connecticut	Pasco	Tampa-St. Petersburg
Florida	Hillsborough	Tampa-St. Petersburg
	Sarasota	Sarasota
Georgia	Martin	Fort Pierce
	St. Lucie	Fort Pierce
	Cherokee	Atlanta
	Cobb	Atlanta
	Fayette	Atlanta
	Gwinnett	Atlanta
	Bibb	Macon
	Ada	Boise
Idaho	Hamilton	Indianapolis
Indiana	Johnson	Kansas City
Kansas	Anne Arundel	Baltimore
Maryland	Baltimore	Baltimore
	Howard	Baltimore
	Middlesex	Boston
Massachusetts	Plymouth	Boston
Missouri	Jefferson	St. Louis
	Franklin	St. Louis
New Jersey	Monmouth	Monmouth-Ocean
New Jersey	Hunterdon	Middlesex-Somerset-Hunterdon
New York	Rockland	New York
	Orange	New York
Oregon	Washington	Portland
Texas	Williamson	Austin
	Collin	Dallas
	Ellis	Dallas
	Williamson	Nashville
Tennessee	Davis	Salt Lake City
Utah	Chesterfield	Richmond
Virginia	Henrico	Richmond
	Loudon (VA)	Washington, DC
	Prince William (VA)	Washington, DC
Washington, DC	Stafford (VA)	Washington, DC
Washington	Snohomish	Seattle
	Pierce	Seattle

NGF reveals regions needing courses

JUPITER, Fla. — Warning would-be investors to get additional marketing studies done before starting any project, the National Golf Foundation has reported its annual list of "Hot Spots for Public Golf Course Development in the United States."

"This list is only a beginning, not a conclusion," said NGF President Joe Beditz, "but it names the first places I'd look to invest my own money in the golf course business."

The list of 50 counties in 20 states shows opportunity for public course development is not only still strong in

Sunbelt states, but exists in many other areas of the nation as well. California, with nine, has the most — reflecting its top status in total numbers of residents and golfers. Next are Florida, Georgia and Virginia, each with five counties listed.

The NGF has expanded its methods of identifying more exactly where courses are likely to be needed. Researchers analyzed income and age demographics, population density, population growth and migration patterns. These factors were compared with golf facilities existing, in planning or under

construction.

"Actual investment decisions would require additional study of specific market conditions, site constraints, environmental permitting, land costs, availability of financing and other potential limiting factors," said Rick Norton, who as head of NGF Consulting directed the analysis.

The NGF is emphasizing public golf course development because golf in the United States is predominantly a public game. More than 70 percent of the nearly 500 million rounds played annually are recorded at public facilities.

Morrish back in form

Morrish, who with Weiskopf in 1989 designed *Golf Digest's* top two new private courses — Shadow Glen in Kansas City and

Forest Highlands in Flagstaff, Ariz. — has battled back from a heart attack that required quadruple bypass surgery in May.

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Best architects

Continued from page 20

He saw Troon North, a resort course in Scottsdale, Ariz., open to extraordinary reviews. Touring pros gave it high marks after playing a Shootout there.

Harbor Club in Greensboro, Ga., will open this spring.

Morrish has five others under construction including Loch Lomond in Scotland, Double Eagle in Columbus, Ohio, Bloody Point at Daufuskie Island, S.C., Northwood in Dallas, and Country Club of St. Albans in St. Albans, Mo.

Morrish and Weiskopf were the first Americans ever selected to design a course in Scotland.

"We're getting better and better," Morrish said. "Contractors understand what we want to do more and more. Clients who want something special are coming to us more and more."

Morrish, who worked with the Fazios, Desmond Muirhead and Jack Nicklaus before opening his own firm in 1983, said: "People knew me through yesteryear with Tom (Fazio) and Jack (Nicklaus). But they did not know what I could do by myself. Now we have established our credibility."

Morrish and Weiskopf have taken that credibility to some special sites — from Scotland to

Cypress Point

Continued from page 19

back par 5s, back-to-back par 3s. I love that."

Countered Tom Johnson, an architect with Denis Griffiths & Associates of Braselton, Ga.: "Cypress Point may have the grandeur and beauty. But as far as layout and design go, you can't beat Pine Valley."

"It doesn't compromise. The design of many of today's courses are dictated by other things than golf, like real estate or the age of the players. There's none of that at Pine Valley. It was designed as a true test of golf that you have to think your way around...Crump couldn't have done a better job with the terrain he was given."

Pinehurst's slip to No. 3 may be the result of the course's age, according to Johnson.

"I'm from North Carolina and I love Pinehurst," he said. "But it's a short course designed in a different era. If they hold another PGA Tour event there, some players could have rounds of 10, 12 or 15 under."

Pebble Beach (designed by Jack Neville and Douglas S. Grant) along with Augusta National (Alister Mackenzie and Robert Tyre "Bobby" Jones, Jr.) are returnees from last year's Top 5 list.

Other courses mentioned by at least 10 percent of the architects include Shinnecock Hills GC (William F. Davis, William S. Flynn and Howard Toomey) in Southampton, N.Y.; Seminole GC (Ross) in North Palm Beach, Fla.; Merion GC (Hugh Wilson) in Ardmore, Pa.; and Harbour Town Golf Links (Pete and Alice Dye, Jack Nicklaus) on Hilton Head Island, S.C.

Ohio. Bad weather has held back construction at Loch Lomond, but they hope it will be finished next summer.

Being the first Americans, Morrish and Weiskopf have been "looked at through a microscope," Morrish said. "But the British press and players are very impressed with the course so far. The Scottish brought golf course design to America. Now we've taken Scottish work back to Scotland. The course is very traditional. It's got the Winged Foot, Merion and Augusta National feeling to it."

Morrish and Weiskopf have been looked at through a microscope' in Scotland.

He said the Loch Lomond site has a "beautiful change of terrain ... and huge, huge trees. It will be something special."

Yet, he said the Double Eagle course in Columbus "may be our standardbearer. It's a knockout."

Developed by John McConnell,

owner of Weddington Industries, the course will have just 50 members and no housing other than clubhouse.

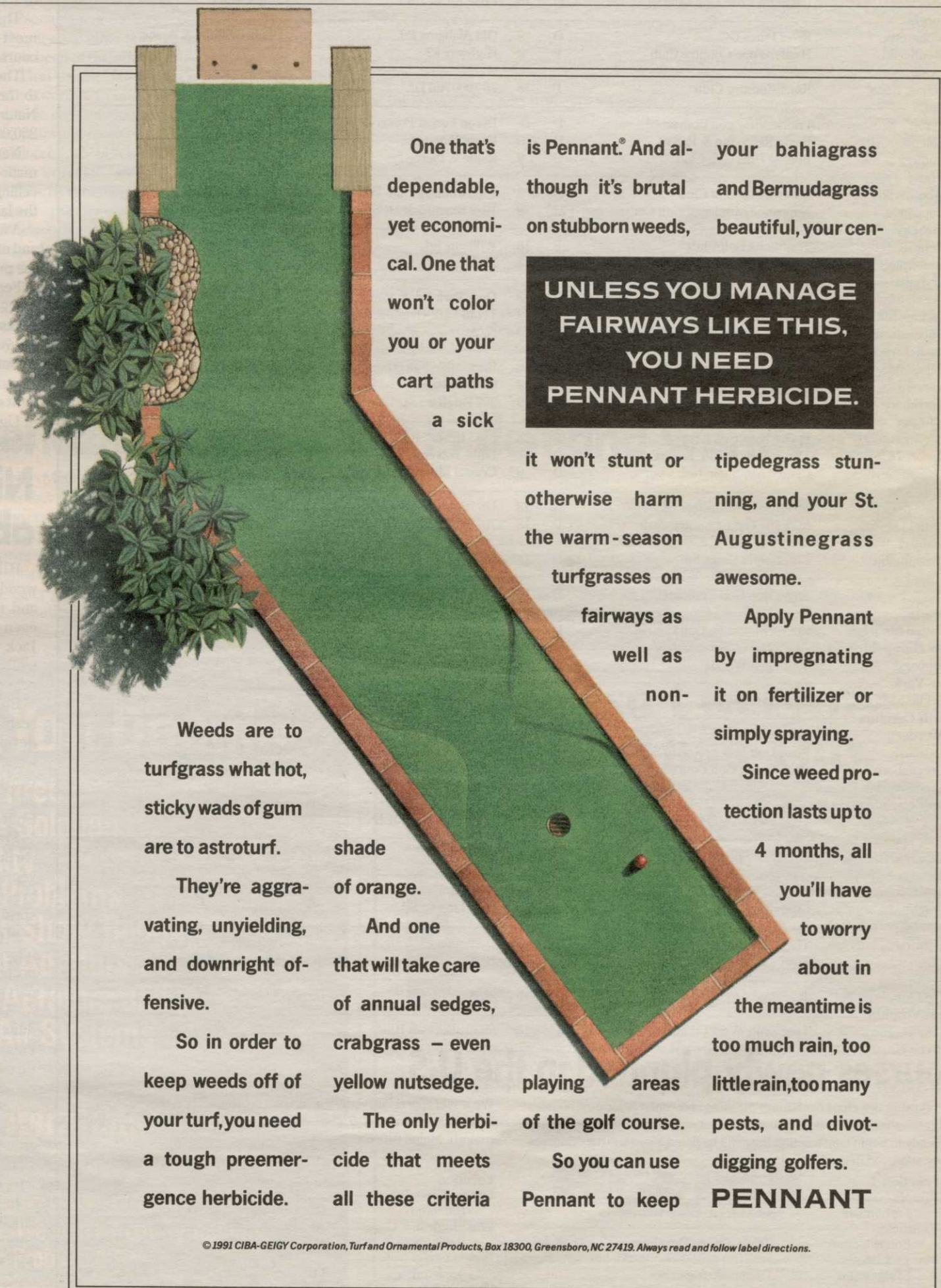
"It has a lot of the feeling of (Alister) Mackenzie or (George C. Jr.) Thomas or (Donald) Ross or (A.W.) Tillinghast. It will look like it's been there forever and ever when we're finished. They have all but four greens built and have irrigation in on eight holes and it will definitely be finished next spring."

Double Eagle's rolling terrain is half covered with woods and half with meadows, and winds

around several big lakes.

"It does everything a golf course should do. We have a nice mix of reachable par 5s, one unreachable par 5, a couple of driveable par 4s, the 3s go in all different directions and vary in length. We have a nice change of direction, nice change of terrain, nice change of pace. We have water holes, open holes and wooded holes. It just feels nice," Morrish said. "In my mind, it will be at least as good as Shadow Glen."

He said they have "great expectations" for Harbor Club, which sits along Lake Oconee.



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Courses newly approved in U.S.

Golf Course News is publishing this list monthly. It includes courses that have been approved around the country in the past month. In addition, the chart on the next page contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be listed again in this "Courses newly approved in

the U.S." chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write *Golf Course News*, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine 04096.

Under "Type" — D= Daily Fee; P= Private; and M= Municipal.

Location	Course Name	Type	Holes	Address	Architect/Contact
California					
Mammoth Lakes	Snow Creek Resort	D	9	N/A	Ted Robinson
Palm Springs	The Classic	D	27	Gene Autry Trl.	B. Nelson/D.A. Weibring
Ramona	Mt. Woodson Golf Course	D	18	Highway 67 & Archie Moore	Lee Schmidt
San Diego	Las Montanas Country Club	D	18	N/A	Arthur Jack Snyder
Vallejo	Sky Valley	P	18	4750 Highway 50	Arnold Palmer/Ed Seay
Florida					
Bonita Springs	Worthington Country Club	P	18	13501 Bonita Beach Rd.	Gordon G. Lewis
Plant City	Walden Lakes Polo Country Club	P	9	2001 Country Club Dr.	Ron Garl
Stuart	Palmetto Cove Golf Course	D	18	Cove Rd. & US 1	Tom Fazio
Georgia					
Alpharetta	River Pines GC	D	9	Old Alabama Rd.	Denis Griffiths & Assoc.
Monticello	Hunter-Pope Country Club	P	9	Highway 82	Mike Young
Hawaii					
Kailua, Kona	Kona Country Club	P	18	78-7000 Alii Dr.	Jack Nicklaus
Illinois					
Byron	Prairie View golf Course	D	18	Byron Forest Preserve Dist.	William J. Spear
Galena	Eagle Ridge Inn & Resort	D	9	Eagle Ridge Dr.	Roger B. Packard
Godfrey	Rolling Hills Golf Club	D	9	Route 2, Pierce Ln.	Gary Kern
Indiana					
Mooresville	Mooresville Golf Club	D	9	1665 Country Club Rd.	Gary Kern/Ron Kern
Nappanee	Nappanee Municipal Golf Course	M	9	1022 Shamrock Meadows	Gary Kern
Kentucky					
Hebron	Traditions Golf Club	P	18	Williams Rd.	Mike Macke
Louisville	Polo Fields	D	18	N/A	William Newcomb Assoc.
Maryland					
Ocean City	The Beach Club	D	18	Deer Park Rd. & Route 113	Ault, Clark & Assoc.
Owings Mills	Caves Valley Golf Club	P	18	11745 Park Heights Ave.	Tom Fazio
Queenstown	Queenstown Harbor Golf Course	D	9	N/A	Lindsay Ervin & Assoc.
Massachusetts					
Barnstable	Barnstable Municipal GC	M	18	Barnstable Fairgrounds	Cornish & Silva
Harvard	Shaker Hills Golf Course	D	18	Shaker Rd.	Cornish & Silva
Northboro	Juniper Hill Golf Course	D	9	202 Brigham St.	Philip A. Wogan
Michigan					
Adrian	Wolf Creek Golf Club	D	18	6363 Burton Rd.	John Francoeur
Resort Township	Three Fires Pointe Resort	D	36	Little Traverse Bay	N/A
Thompsonville	Crystal Mountain Golf Course	D	9	Crystal Mountain M-115	William Newcomb Assoc.
Minnesota					
Cottage Grove	River Oaks Municipal GC	M	18	US Highway 61	Don Herfort
Ham Lake	Majestic Oaks Country Club	D	18	701 Bunker Lake Blvd.	George Williams
Missouri					
Washington	Bittersweet Golf Club	D	18	N/A	Gary Kern
Nebraska					
Omaha	Eagle Run Golf Complex	D	18	3435 N. 132nd St.	Jeffrey D. Brauer
Nevada					
Round Mountain	Round Mountain Golf Course	D	9	Round Mountain	William Howard Neff
New Hampshire					
Amherst	Souhegan Woods	D	18	Thortons Ferry Rd. II	David Friel/Phil Friel
New York					
Bridgehampton	Atlantic Golf Club	P	18	Scuttlehole Rd.	Rees Jones, Inc.
North Carolina					
Aberdeen	Legacy Golf Links	D	18	Highway 15-501	Jack Nicklaus II
Calabash	Pearl Golf Links (North/South)	D	36	Old Georgetown Rd.	Clyde B. Johnston
Greensboro	Rock Creek Golf Course	D	18	N/A	Tom Fazio
Sapphire Valley	Laurel Forest Golf Club	P	9	4000 Highway 64 West	D.J. DeVactor
South Carolina					
Myrtle Beach	River Oaks Golf Plantation	D	27	3400 Highway 501 N	Tom Jackson
South Dakota					
Rapid City	Fountain Springs GC	D	9	Plaza Blvd.	Jim Simpson
Tennessee					
Chattanooga	Council Fire	P	18	Julian Rd.	Robert E. Cupp
Franklin	Greene Springs	P	18	Old Harding Rd.	Joseph L. Lee
Virginia					
Henrico County	The Dominion Club at Wyndham	P	18	Dominion Club Dr.	Ault, Clark & Assoc.
Leesburg	River Creek Golf & CC	P	18	N/A	Ault, Clark & Assoc.
Washington					
Cle Elum	Two Rivers Recreation GC	D	18	N/A	N/A
West Virginia					
Charles Town	Tusawilla West Country Club	P	18	660 Tusawilla Hills	N/A

Courses newly planned in the U.S.

Following is a chart containing the sites and contacts for new courses and renovations in the preliminary planning stages. When these courses are ready to begin construction they will be listed again in the "Courses newly approved in the U.S." chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write *Golf Course News*, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine 04096.

Location	Contact	Location	Contact
Illinois			
Carbondale	Roy Glenn, Carterville	Hamilton	Muirfield Development, Dublin
Kentucky			
Boone County	Triple Crown Development	Washington	The Trillium Corp.
Massachusetts			
Bridgewater	Dennis Weingartner	Wisconsin	THK Assoc., Denver
		Appleton	

One of world's seven wonders a course feature

NATURAL BRIDGE, Va. — One of the seven natural wonders of the modern and new world will be a backdrop to The Links at Natural Bridge. The 18-hole championship golf course designed by Algie Pulley Jr., is scheduled to open during the second half of 1991.

Natural Bridge is a 36,000-ton limestone structure, carved over millions of years by the waters of Cedar Creek which flows below. The Bridge stands 215 feet high (more than 25 stories) is 90 feet long and ranges from 50 to 150 feet wide.

The course is "destined to be one of the most breathtaking and challenging golf courses in Virginia," Pulley said.

The course will offer an added dimension to the Natural Bridge Village, home of the Natural Bridge, which is visited by more than 250,000 people a year.

Natural Bridge Caverns, geological formations that are 34 stories underground with ceilings that reach 100 feet high, are also on the land.

A wax museum houses 152 life-like figures and offers an on-site working factory open to the public.

Featuring multiple tees and large undulating greens averaging 8,000 square feet, the Links with play from 5,400 to 7,190 yards at par 72.

Natural Bridge Village also boasts the "Drama of Creation," a nightly sound and light show at the Bridge and a yearly Festival of Lights held from after Thanksgiving into January.

Nicklaus raves about S.C. site

HILTON HEAD ISLAND, S.C. — Heavily wooded lowland areas, open spaces, salt and fresh water marshes, riverfront and even an area of dunes mark the site of the Jack Nicklaus signature golf course at Colleton River Plantation, which is on schedule for a fall opening.

Colleton River Plantation is a private residential country club community being developed by the Hilton Head Island-based Colleton River Co., L.P. on 700 acres adjacent to the South Carolina Nature Preserve and Moss Creek Plantation along the Colleton River.

Malphrus Construction began earthmoving and lagoon excavation in November. Grassing of the fairways, tees, greens and rough areas is planned for late spring or early summer.

"The site of Colleton River Plantation offers as much variety as any golf course property that I've seen in the Southeastern part of the United States," Nicklaus said.

"The last five holes will play through the dunes, which reminds me a little of Cypress Point," he said. "At Cypress Point, you play through the trees and all of a sudden you come out into the sand dunes, which offer a nice contrast. I'm not saying this is Cypress Point, because I don't think there's any more magnificent property in the United States than Cypress Point, but this isn't far behind."

In addition to the 18-holes, championship-length course, Nicklaus will design an "Augusta National-type" par 3 course that will wind through the grounds near the clubhouse.

Wadsworth repeats as best golf course builder

Continued from page 19

ally built our Southeast business and enjoys that part of the country," Wadsworth said.

• **Steve Harrell, Southwest.** Harrell, 43, is the only regional president from outside Illinois. The Nebraska



B. Wadsworth

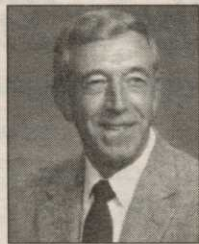
native approached Wadsworth several times before he was hired as a drainage expert in 1979. "He was persistent," Wadsworth remembered. "We're glad he was." Harrell was named president of the Southwest office in Buckeye, Ariz., outside Phoenix in 1985.

• **Tom Shapland, Pacific sub-office.** Shapland, 38, is a University of Illinois graduate, like brother Jon. After joining the firm in 1974 and working in the Southeast office for many years, he was assigned to head up the new Hawaii sub-office that opened last year. His title is actually vice president of operations for the Pacific office, which has already built three courses and is working on three others.

Wadsworth's lieutenant is John Cotter, 57. The company's first employee when it opened in 1958,

Cotter and Wadsworth got together at the urging of Cotter's wife, a childhood friend of Wadsworth in his native Joliet, Ill.

"I asked him how he'd like to run a tractor for me," Wadsworth recalled of the company's current vice



J. Cotter

chairman of the board. "It turned out he had a lot of other talents, too. He had management skills, was very personable and business-oriented. He attracted other talented people. He's been of the utmost value."

That's the staff that's led Wadsworth's troops into the golf course construction wars the past 32 years and received a third of the ballots cast for best builder, up from one-fourth of the votes a year ago.

"We're extremely honored to receive the award again," said Wadsworth. "We appreciate the feelings of our associates and the people in the industry for voting for us."

The company chairman added "working as hard as ever to meet the needs of the people we work for, especially the architects," was the main reason his company has earned such a positive reputation.

Added Eldredge: "We have our own staff and equipment. That allows us to control jobs more than other contractors who have to subcontract out more work."

"We can also draw people and equipment from other areas if we're short on a certain job."

That has made us good at delivering a quality product in a given time period."

Being on time and on budget is obviously important to the many architects who have worked with Wadsworth. Sample comments from those selecting the company included:

• "They still set the standard." — Gary Panks.

• "Always consistent and honest." — Jay Morrish.

• "No one does it better." — Michael Hurdzan.

• "They continue to do the best work." — Keith Foster.

Wadsworth said the recession has had a "very slight" effect on business. Revenues will again be in the \$40-to-\$50-million range, as they were a year ago. Many of the projects completed or nearing completion



P. Eldredge

were started before the downturn really hit.

"There don't seem to be as many opportunities for new courses as the past few years," Wadsworth said. "The S&Ls, banks and insurance companies have pulled back on financing."

"We didn't seem to have as many big jobs this year," said Eldredge. "For instance, there was a large earthmoving job at a Hawaiian course we're working on that the developer decided to do himself. And there were several jobs that were supposed to start in September or October that have been delayed."

Wadsworth said construction costs have risen along with the rise in petroleum prices.

"A lot of the piping we use is petroleum-based," he said. "Then there is all the gasoline we use to run our equipment."

Still, it has been a good year for Wadsworth. Following are the courses (and the architect) that the company's regional offices built and completed in 1990:

Midwest — University of Wis-

consin Golf Course, Madison, Wis. (Robert Trent Jones II); Ivanhoe Golf Club, Ivanhoe, Ill., and Seven Bridges Golf Course, Woodbridge, Ill. (Dick Nugent & Assoc.); Conway Farms South, Lake Forest, Ill. and The Landings, Savannah, Ga. (Fazio Golf Course Designers); Cobblestone Creek Country Club, Victor, N.Y. (Hurdzan Design Group).

Southeast — Cedar Creek Golf Course, Aiken, S.C., The Golf Club of Georgia, Alpharetta, Ga., and Bonita Bay Golf Course, Bonita Springs, Fla. (Arthur Hills & Assoc.); Chicopee Woods Golf Course, Gainesville, Ga. (Denis Griffiths & Assoc.).

Southwest — Black Mountain Golf Club, Henderson, Nev. (Golf Resources, Inc.); Four Seasons Golf Course, Lake Ozark, Mo. (Ken Kavanaugh); Bighorn Golf Course, Palm Springs, Calif. (Arthur Hills); Champions Golf & Country Club, Rogers, Ark. (Donald R. Sechrest).

Pacific — Hyatt Regency Kauai, Koloa, Hawaii (Robert Trent Jones II); Mid Pacific Country Club, Kailua, Hawaii (Nelson-Wright Architects).



J. Shapland

Maples: American architects are in demand worldwide

American-style golf courses — considered the standard — are in record demand around the globe, according to American Society of Golf Course Architects President Dan Maples.

"Obviously the Pacific Rim has been a fertile market for American-style golf courses for the past de-

cade," Maples said, "but today our members are receiving inquiries from every continent."

Maples, of Pinehurst, N.C., pointed out that Europe is in the midst of a golf boom and has even greater potential now that Eastern Europe is interested in attracting tourists and business people with

hard currency.

"World travel and television have combined to show people in nearly every country the high-quality design and maintenance features of our courses," Maples added, "and the international market considers our golf courses to be the standard they want in

their countries."

Maples said many of the "hot" development areas, such as Spain and Germany, are naturals for golf courses, but there has been significant activity in areas not necessarily associated with golf, such as the Scandinavian countries.

"The society and individual

members are receiving many inquiries from developing countries that recognize the drawing power of golf courses designed by recognized American architects," Maples said.

He believes there will be more public/private partnerships internationally to develop courses.

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Golf course archaeology

Aspen Corp. treads carefully as it unearths a Tillinghast treasure

By Mark Leslie

One day a horseshoe jammed a trencher chain. Another day the work crew found perfectly preserved horseshoe and cart wheel tracks.

By the time Wyoming Valley Country Club in Wilkes-Barre, Pa., was renovated, its members had two things: a lesson in history, and what

USGA Regional Director Stan Zontek called "probably the most pure (A.W.) Tillinghast course in the country."

"This is a fascinating story. In 20 years with the USGA I've never quite come across a story like this," said Zontek, whom Wyoming Valley CC officials had called in to help

with turf problems.

"At the 3rd or 4th hole, under all the overgrowth, the changed bunkers and underbrush, I could see that the designer knew what he was doing. When I asked them who the architect was they said, 'Someone called Tillinghast.'"

Albert Warren Tillinghast, one of America's most revered golf course architects, left behind a legacy of fine creations when he died in 1942. One was Wyoming Valley, nine holes of which were built in 1896 by an unknown architect. They were remodeled when Tillinghast designed a new nine in 1924.

After his inspection, Zontek wrote to the club: "In all candor, this agronomist is excited with the potential your course has. I honestly do not believe the average member truly appreciates what kind of golf course your club has and how good it could become through a plan to basically put your course back to its original design and then to carry through a reasonable golf course maintenance program to improve turf quality and, once renovated, to maintain what you have."

"The end result (of renovation) could be a great, classic Tillinghast course..."

Greens Chairman Dr. Daniel Mazzocco then "got revved up," Zontek said, and began digging into history, into the club's archives, into its attic. And amidst his digging he found Tillinghast's original pen-and-ink drawings.

"I've never seen a Tillinghast drawing anywhere," Zontek said.

Wyoming Valley hired Aspen Corp. of Daniels, W.Va., which had experience in renovation work, to restore Tillinghast's famed deep bunkers.

Zontek had told them: "Many greenside bunkers need work. Specifically, some which are now grass need to have the sod removed and sand replaced. Other bunkers that have grown in over the years need to be edged back to their original design."

"The third stage of the bunker improvement work is more comprehensive. Over the years, a number of your sand bunkers have been so rebuilt that they are not even remotely similar to the way they were designed and the way they should be. Designwise, you should work toward essentially flat sand with grass banks extending down to this sand."

"The potential is there. It just takes the planning and commitment from the club to have a truly great golf course."

After research using the Tillinghast drawings and old parched-paper blueprints and

'At the 3rd or 4th hole, under all the overgrowth, the changed bunkers and underbrush, I could see that the designer knew what he was doing. When I asked them who the architect was they said, "Someone called Tillinghast." ... It's probably the most pure Tillinghast course in the country.'

— Stan Zontek, USGA agronomist

talking to long-time members, Aspen started the renovation in December 1989 by installing a drainage system. From April to August, Aspen crews worked 80 to 90 hours a week at some of the most precise work ever done on a golf course.

"It was like being an archaeologist, tracing things back layer by layer," said Ronnie Adkins, a certified golf course superintendent and vice president of Aspen Corp.

Buried under many feet of cinder ash, clay and sand, the bunkers were "preserved perfectly and in mint condition," Adkins said.

Dr. Mazzocco attributes the changes made in the bunkers to "some president 50 or 60 years ago who didn't like deep bunkers."

Adkins felt that during the Great Depression, club members decided they couldn't afford to maintain the course, particularly the deep-faced sand bunkers.

"So they filled the bunkers with one to four feet of cinder ash, covered that with six inches to two feet of clay to lessen the se-

Continued on page 25

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☐ k. Assistant Superintendent ☐ e. General Manager ☐ i. Research Professional
☐ b. Green Chairman ☐ f. Owner/CEO ☐ j. Others allied to field
☐ c. Director of Golf/Head Pro ☐ g. Builder/Developer

2. My primary business is:

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☐ 2. Private Golf Course
☐ 3. Municipal/County/
State Course
☐ 4. Hotel/Resort Course
☐ 5. Golf Course Architect
☐ 6. Golf Course Developer
☐ 7. Golf Course Builder
☐ 8. Other, please specify _____

3. Number of holes:

- ☐ a. 9 holes ☐ d. 36 holes
☐ b. 18 holes ☐ e. Other, please specify _____
☐ c. 27 holes

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☐ 2. \$51,000-\$99,999 ☐ 6. \$750,000-\$1,000,000
☐ 3. \$100,000-\$249,999 ☐ 7. Over \$1,000,000
☐ 4. \$250,000-\$499,999

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Photos courtesy of Aspen Corp.
An Aspen Corp. backhoe operator uses extraordinary care as he digs out a sand bunker at Wyoming Valley Country Club in Wilkes-Barre, Pa. The inset at top right shows the layers of sand, ash and soil that had been added to the original bunker when A.W. Tillinghast remodeled the original nine holes and added a new nine in 1924.

Continued from page 24

verity of the original bunkers. Then sand was laid on that. More sand was added over the years, so that the bunkers had six inches to two feet of sand over the clay," said Adkins.

A few bunkers were altered or added over the years.

Knowing Tillinghast's bunkers were contiguous to the greens, the Aspen crew began the tedious work of feeling their way down into and away from the current bunkers.

"We removed all the sod. We knew existing bunkers most likely covered the original ones," Adkins said. "We removed the layers and found the coal ash had totally preserved the bunkers.

"It was like archaeologists. The original sand was there. The horse tracks and two-wheel cart tracks, too."

Aspen President Donnie Adkins said he or his brother Ronnie were always on site to make sure the operators "used as much precision as possible."

Probes were used to discover how deep each layer was before digging.

"We would probe two feet, then dig two inches at a time until we found the old sand," Donnie said.

The process was the same breadthwise as depthwise.

They used 580K backhoes equipped with three-foot-wide toothless buckets. The four-wheel-

drive machines with 18-foot extenders enabled the backhoes to work at each hole with minimal damage to the turf.

"We thought going in that we would work on three or four traps," said Donnie, but 55 to 60 of the 70 bunkers required renovation.

"We were very interested and excited by this project," said Donnie Adkins. "I enjoy renovation and reconstruction work. Now we're working on a Donald Ross course — Edgewood Country Club — in Pittsburgh."

The price tag for the Wyoming Valley project was more than \$350,000.

Was it worth it?

"Essentially they have a brand

helped its members appreciate what they have."

Mazzocco, who "had to go to hell and back" to push the project through the board of directors, said: "Now they're all saying what a great idea it was. Aspen did a magnificent, incredible job.

"People come off the course and say, 'Awesome.'"

He added: "I'd say that now 95 percent of the members would say it was worth it. Actually, we got a bargain. Aspen had given us the \$350,000 quote two years before, and they stuck with that figure. Their concern was that this be done exactly the way Tillinghast designed it."

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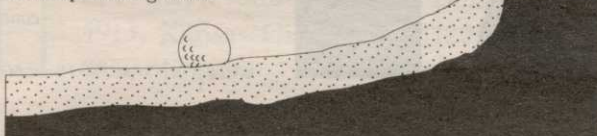
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Golf course development labeled 'team effort'

By Peter Blais

Having superintendents work with and help select golf course architects and contractors are becoming increasingly important as superintendents are brought in earlier and earlier in the golf course development process, according to architect Michael Hurdzan.

The most successful projects result from a team approach between superintendent, architect and contractor, the Columbus, Ohio-based designer said during a recent Golf Course Superintendents Association of America seminar in Manchester, N.H. Each contributes his expertise without invading the others' turf.

Basically, according to Hurdzan, the superintendent knows how to obtain the best plant growth at the lowest cost. The architect visualizes the golf features and communicates his ideas to the contractor. The contractor builds the course in the quickest and most efficient manner.

The superintendent should work directly with the architect rather than the contractor, especially during new construction. This keeps the design intent intact and holds down costs.

The superintendent can act as the owner's technical researcher in the earliest stages of development, helping provide the architect such information as soil maps and descriptions; underground water resources; property boundaries, easements and right-of-way provisions; E.P.A. restrictions for the site; buried utilities; historical or ecological designations; zoning and floodplain restrictions; and proposed upstream or neighboring uses.

As the project progresses into the design phase, Hurdzan said the superintendent can help save thousands of dollars with input on technical matters like type of greens construction (U.S.G.A., Purr-Wick); irrigation system and pumping plant types and brands; blending of turfgrasses; bunker sand type; drainage system and network; clearing and selective thinning of adjacent or no-play areas; type and blends of soil additives or amendments; types and blends of fertilizers or pH adjustment materials.

Once construction starts, the superintendent can expect to put in 60 to 80 hours per week, Hurdzan said. His responsibilities include design and construction of maintenance buildings; location and construction of service roads, storage areas and limited cart paths; providing power to pump station sites; selecting and bidding maintenance equipment and supplies; spot inspections of irrigation and tile installations, greens mix and seed bed preparation; construction of rain shelters, restrooms and drinking water stations; preparing maintenance budget and ordering supplies for early growth phases of turf; acquiring all building permits, utilities and services; and interviewing potential employees.

In some cases, the contractor's responsibility ends with planting. In

others, it may extend to establishing the course - i.e. watering, fertilizing, mowing, mulch removal, rolling, erosion repair, additional rock picking, etc.

Because of his training, the superintendent can establish and mature the course as well, if not better, than the contractor, Hurdzan said. This is the latest a superintendent should be hired.

Other tasks the superintendent must complete before the course opens to play include interviewing and selecting staff; measuring the

While the superintendent can play an important role in new course construction, his contributions during renovation work are often even greater.

course; establishing mowing heights; smoothing and firming putting surfaces; selecting and installing cups, pins, tee markers and other accessories; filling, compacting and smoothing bunkers; planting landscape features;

marking property lines, out-of-bounds and water hazards; installing safety signs and devices.

While the superintendent can play an important role in new course construction, his contributions during renovation work are often

even greater, Hurdzan said.

Direct communication between superintendent and contractor becomes necessary since even a minor construction mistake can drastically affect ongoing play. The two must coordinate their efforts regarding entrance roads or fence breaks to bring in equipment and materials; areas to stage and store equipment and supplies; the sites for borrow pits and disposal piles; local laws, regulations and E.P.A. requirements; designated travel lanes or traffic patterns; location,

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size and depth of underground utilities; local materials suppliers; golf, tournament and work schedules; knowledge of local soils, weather and grasses; club's infrastructure and members' personalities; construction shutdowns and planned or required maintenance; selection of vegetative, plant or seed materials.

The architect's role during renovation is to design a new golf feature that satisfies the golfers and leaves the superintendent with an easily maintained facility.

Selecting an architect isn't easy.

The architect's role during renovation is to design a new golf feature that satisfies the golfers and leaves the superintendent with an easily maintained facility.

More than 350 people have shingles reading "Golf Course Architect," said Hurdzan.

"They're all different and come with different skills. So how do you choose one?" he asked.

Occasionally a developer or superintendent is pre-disposed to se-

lect a particular architect based on personal experience or recommendations. If not, there are two primary lists of architects available.

The National Golf Foundation publishes one. The only requirement to be included is a check that doesn't bounce, said Hurdzan.

A better one, "and this is only my opinion," is the American Society of Golf Course Architects membership list, Hurdzan said.

The ASGCA requires those applying for membership to have designed seven courses in the previous 10 years. Several projects must be favorably reviewed by a screening committee before an applicant is accepted as an associate member. The associate's work must be reviewed again before he or she is accepted as a full member three years later.

"Being a member of the ASGCA lets a developer know that architect has at least met some minimum requirements," said Hurdzan, a past ASGCA president.

A request for proposal detailing what the developer wants done and asking for information about the architectural firm is sent to those architects working in the area. The returned proposals should include how the architect works, to what extent they are personally involved, how they charge as well as a complete list of work done in the last five years and contacts for each job.

"One of the most important considerations is the skills of the people you'll be primarily working with," said Hurdzan. "For instance, if you hired Robert Trent Jones, you might see mostly Roger Rulewich. Or if you got Tom Fazio, it might be Tom Marzolf or Jan Beljan. If you hired Jack Nicklaus, don't expect to see much of him. But that's probably fine. The people who work for them are generally very well qualified. Just don't be surprised when the big names don't show up all the time."

Another consideration is price. Fees for an 18-hole course generally range from about \$100,000 to the \$1.25 million commanded by Nicklaus and Arnold Palmer. Are a Palmer or Nicklaus worth the additional money?

"The designer label doesn't really mean anything unless you're trying to sell something," said Hurdzan.

For example, say a developer had 300 home sites and figured the Nicklaus or Palmer names could bring an additional \$10,000 per lot. If the developer was right, that's another \$3 million.

"I'll guarantee their courses aren't a damn bit better than ours," said Hurdzan, whose firm charges \$200,000 for 18 holes. "But if the developer needs to sell houses, and he can get an extra \$3 million from the lots, then he might consider Nicklaus' or Palmer's \$1.25 million fee a bargain."

With the growth of golf in the late 1980s, architects were often too busy to consider much new work, regardless of the price. That was before talk of recession, the S&L crisis and Iraq's invasion of Kuwait.

"The economy is changing," said Hurdzan, who has noted a recent drop-off in the three to five requests for proposals per week his firm was receiving before the economic downturn. "Developers can afford to be picky today. Even the cheapest golf courses cost \$2 million, so they should be picky."

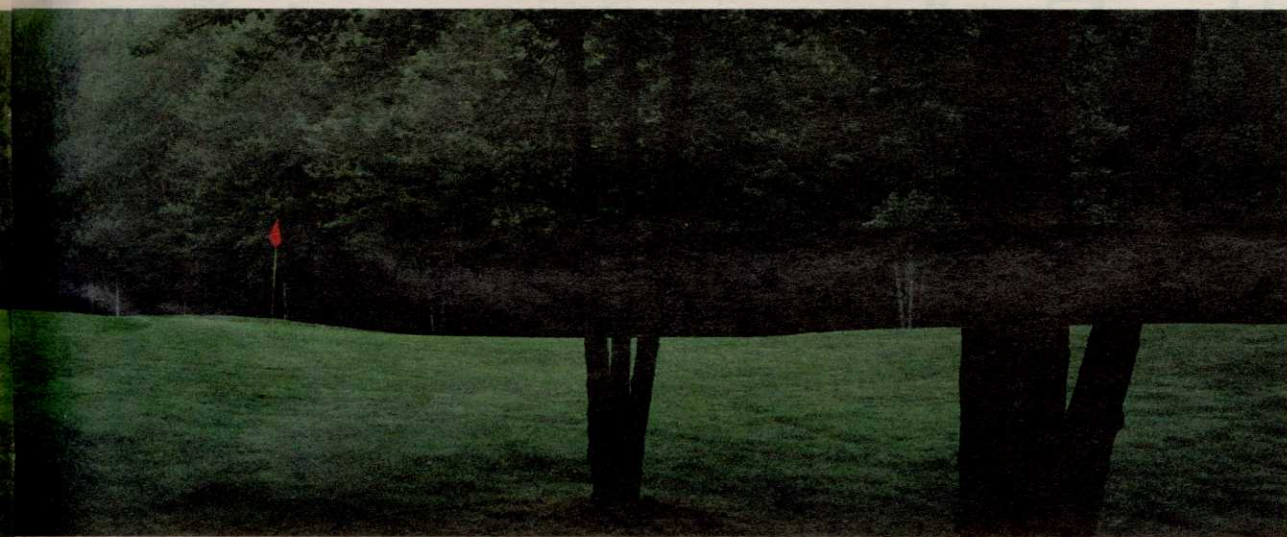
After reviewing the proposals, he recommended selecting three to five of the best, inspecting their work and talking to past clients.

Next interview the top two or three candidates. Have them visit the site, at the developer's expense, and walk a few holes together.

"Ask them what they see. You should have a good idea after that who it is you want," said Hurdzan.

Finally, make a selection and fill out a contract detailing probable timetables for the work.

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 9:10 - Don't bag it
 9:30 - Golf course composting operations
 9:50 - Wetlands: considerations in the construction and management of new golf courses
 10:20 - Crisis communication:

dealing with your members and the media.
 10:40 - Low chemical landscape management
 11:00 - Herbicide mobility in turfgrass
 11:20 - The facts: Vermont model regulations for golf course management plans
 Southern Turfgrass Management
 8:30 - Developing improved

bermudagrass and centipede grass
 8:50 - Developing the optimum cultivation program
 9:10 - Color retention in warm-season grasses
 9:30 - Trends for potassium use on bermudagrass
 9:50 - Managing turf to maximize cold tolerance
 10:20 - Bermuda encroachment into bentgrass greens

10:40 - Turf management on the slope and in the shade
 11:00 - Modified USGA greens: why they're not worth it
 11:20 - Hydrosprigging techniques
 11:40 - Manage job stress: trade frustration for results

GOLF COURSE MANAGEMENT TECHNIQUES: PART II

1:00 - Water-hogging turf: fact or fancy
 1:20 - Turf growth regulators for poa annua
 1:40 - Rolling turf: effects on soils
 2:00 - Varieties for converting fairways to bentgrass
 2:20 - Subsurface application of pesticides and biological controls
 2:50 - Leaching of organics: fertilizers and pesticides
 3:10 - Animal pest problems and recommended controls
 3:30 - Microbiology of minor root pathogens and nonpathogens in high-sand content greens
 3:50 - The right plant for the right location
 4:10 - New concepts on tree planting

LEGAL QUESTIONS AND CONCERNS

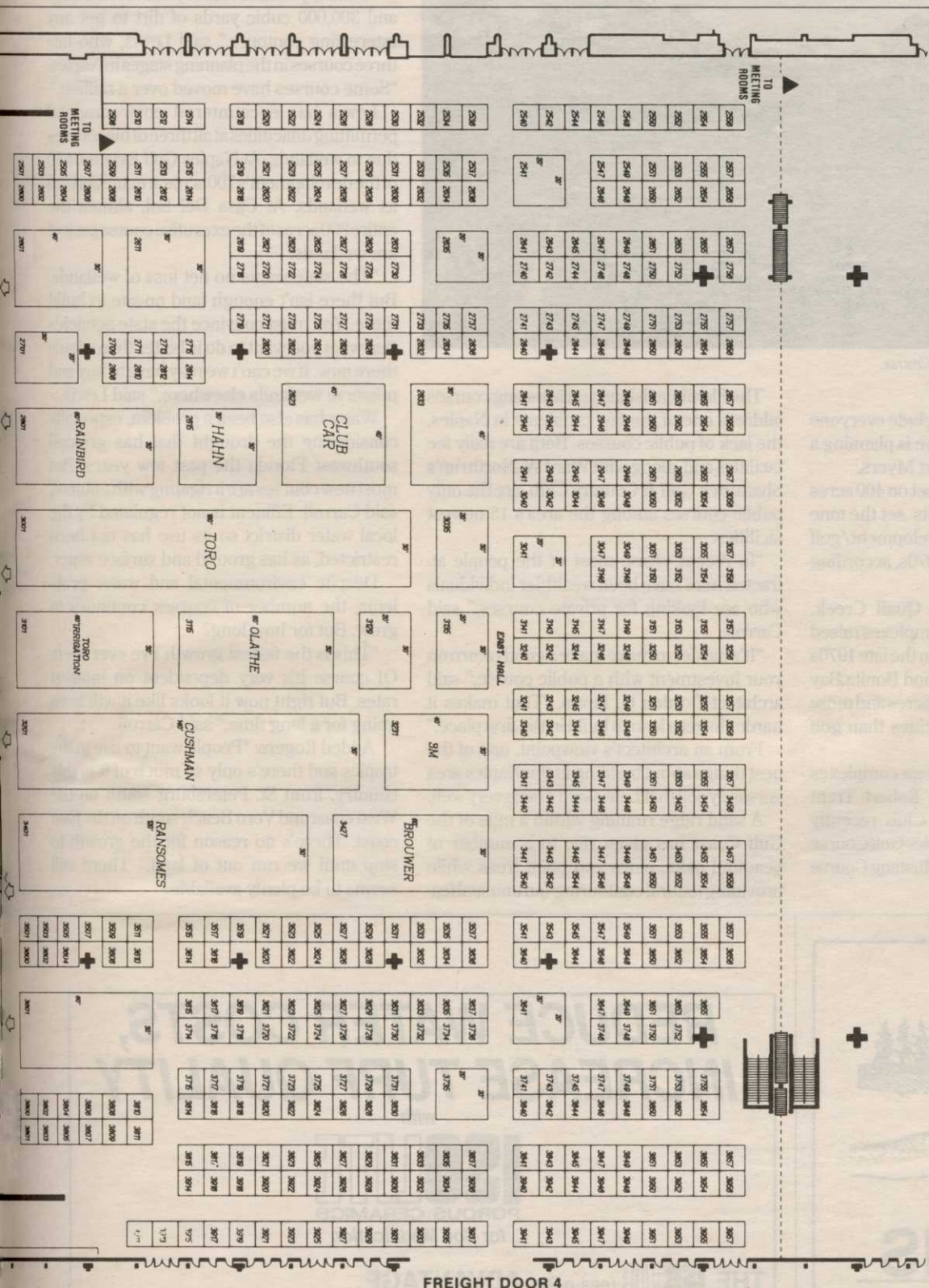
1:00 - Legal questions about job contracts
 1:40 - Wrongful termination: avoiding a lawsuit
 2:00 - Using retired folks for labor

2:20 - State politics made easy
 2:50 - The liabilities of owning and operating a golf course
 3:10 - Liability for chemical damage
 3:30 - Tree hazards and professional liability
 3:50 - Educating club officials on regulations and liabilities

WATER ISSUES

1:00 - Golf course irrigation the '90s
 1:20 - Flood management
 1:40 - Effluent irrigation of turfgrass
 2:00 - Surviving the California drought
 2:20 - Building a water coalition
 2:50 - How to handle your friendly local regulator
 3:10 - Landscape water audits: helping good water managers become better
 3:30 - Developing a plan to reduce water usage
 3:45 - Methods for complying with water allotments
 4:10 - "Water, water everywhere and not a drop ..."

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*'Hot spots', 'golf meccas' ...
there are a number of towns and regions across the country
that attract tourists and money — golfers and green fees.
Number one among them is Naples, Fla.*

Naples — Where course construction never ends

By Peter Blais

You'd think the No. 1 golf city in the country could afford to rest on its laurels. That's not the case in Naples, Fla.

With one golf hole for every 202 residents, Naples is ranked first among 317 U.S. metropolitan areas, according to the latest National Golf Foundation figures. Compare that to the 150th ranked Dayton/Springfield, Ohio area, for instance, which has 15 times as many people (3,123) per hole.

So there are plenty of courses in Naples and no need for new construction, right? Wrong, bogey breath.

Last spring, Naples had more courses (15) planned, under construction or recently opened than any city in the country. What's going on in this town of just 130,000 people?

"It's incredible," exclaimed Cal Korf, executive director of the Florida State Golf Association. "It's an absolute golf mecca."

The climate, beaches and lifestyle draw the people.

"The climate's nice, especially in the winter," said Ed Rogers, director of golf at Bonita Bay Country Club. "There are decent beaches, which aren't necessarily important to the golfer, but are part of an entire package that entices people to move to this section of Florida. And it's not congested like the East Coast."

The quality of the courses keeps golfers coming back, according to John Carroll, director of golf at The Club at Pelican Bay.

"For years, Naples was a hidden-away little fishing town," remembered Carroll. "But the people who came here in the early years started telling their friends about the weather and golf. And that attracted their friends, who in turn attracted their friends. The list of architects with courses here reads like a Who's Who in Golf Course



A golfer putts out at Naples' Bay Course.

Architecture."

Indeed, the list seems to include everyone except Pete Dye, although Dye is planning a course just up the road in Fort Myers.

Wilderness Country Club, set on 400 acres with about 300 residential units, set the tone for large-scale residential development/golf course projects in the early 1970s, according to Carroll.

The larger Windermere, Quail Creek, Bonita Bay and Pelican Bay complexes raised development to another level in the late 1970s and early 1980s. Pelican Bay and Bonita Bay both had approximately 2,400 acres and more closely resemble miniature cities than golf clubs, said Rogers.

The latest wave includes mega-complexes like Lely Resort, where the Robert Trent Jones, Sr. Flamingo Island Club recently opened. The Gary Player Classics Golf Course is under construction and the Mustang Course is in the planning stage.

The Flamingo Island and Mustang courses address one of the few problems in Naples, the lack of public courses. Both are daily fee facilities and, along with Ward W. Northrup's Shamrock Golf & Country Club, are the only public courses among the area's 15 newest facilities.

"In recent years, most of the people attracted here have been wealthier individuals who are looking for private courses," said Carroll.

"It's harder to make a good return on your investment with a public course," said architect Gordon G. Lewis. "That makes it harder to get a loan to build in the first place."

From an architect's viewpoint, one of the best things about building in the Naples area is a sandy soil that Lewis said drains very well.

A sand ridge running within a mile of the Gulf Coast has given rise to a number of beautiful oaks, pines and palm trees while providing natural contouring (an unusual fea-

ture in the generally flat landscape) at courses like Bonita Bay, Pelican Bay and Pelican's Nest, said Lewis.

"Usually you have to move between 250,000 and 300,000 cubic yards of dirt to get any interesting contours," said Lewis, who has three courses in the planning stages in Naples. "Some courses have moved over a million."

Lewis has encountered environmental permitting difficulties at all three of his courses due to wetlands. At Naples Golf Estates, 550 of the development's 700 acres are categorized as wetlands. At Casa Del Sol, almost the entire 200 acres of the executive course project are wetlands.

"The state wants no net loss of wetlands. But there isn't enough land on-site to build more. You must convince the state agencies that what you want to do is better than what's there now. If we can't we may have to buy and preserve wetlands elsewhere," said Lewis.

Water has also been a problem, especially considering the drought that has gripped southwest Florida the past few years. But most new courses are irrigating with effluent, said Carroll. Effluent is not regulated by the local water district so its use has not been restricted, as has ground and surface water.

Despite environmental and water problems, the number of courses continues to grow. But for how long?

"This is the fastest growth I've ever seen. Of course it's very dependent on interest rates. But right now it looks like it will keep going for a long time," said Carroll.

Added Rogers: "People want to live in the tropics and there's only so much of it in this country, from St. Petersburg south on the West coast and Vero Beach south on the East coast. There's no reason for the growth to stop until we run out of land. There still seems to be plenty available."



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A tale of two cities: KC and St. Louis

Divergent approaches to golf growth

By Peter Blais

Kansas City is the smooth-talking salesman with his foot in the front doorway to the ever-changing West.

St. Louis is the banker in the three-piece suit guarding the back door of the Eastern establishment.

That may be an over-simplification of the difference between Missouri's two largest cities. But it helps explain how the two have approached the growth of the golf industry.

Kansas City has ridden the crest of the golf wave the past few years. K.C. is ranked 177th among 319 major metropolitan areas in terms of golf holes per capita, according to NGF's 1989 figure.

"We should move up a lot this year," predicts Kansas City Golf Association Executive Director Robert Reid.

Reid's optimism springs from the five new K.C.-area courses opened the past two years and the two scheduled to come on line in 1991.

Opening in 1989-90 were Tom Fazio's Halbrook Country Club in Leawood, Kan., which holds the country's second-highest slope rating; Robert T. Jones Jr.'s Deer Creek Golf Course in Oberland Park, Kan., which hosted a Hogan Tour event last August; Jay Moorish/Tom Weiskopf/Tom Watson's Shadow Glen Golf Course in Olathe, Kan., Golf Digest's Best New Private Course in 1989; and Donald Sechrest's Heritage Park in Olathe and Loch Lloyd Country Club in Belton, which will host a Senior Tour event June 28-30.

Sechrest's Tiffany Springs and Jones's Heritage Greens Country Club, both in North Kansas City, are expected to open in 1991.

The city's oldest course, A.W. Tillinghast's Swope Park Golf Club, re-opened last summer after a year's re-design work that included renovations and the additions of 55 bunkers and four greens.

The recent construction boom is an abrupt reversal of the last 10 years, when virtually no new courses were built, said Reid.

"I think that (the lack of building) was a hangover from tennis," he said. "Golf has just been catching on stronger every year. It also has a lot to do with the Kansas City area. We're right on the Missouri-Kansas border and draw people from both states. Johnson County in Kansas is something like the second most affluent county in the country next to Westchester (New York)."

2nd nine would double revenues, city officials told

DUXBURY, Mass. — Annual income from the town-owned North Hill Golf Course within five years would be doubled to nearly \$700,000 with addition of a second nine, said the North Hill advisory committee.

Expansion project costs range from an estimated \$750,000 to \$1 million.

The course now generates \$300,000 in revenue a year, exclusive of costs.

Concerning expansion financing, fiscal advisory committee chairman Jim Murphy said, "It's a good idea for the town no matter how you structure it."

Although St. Louis (2.5 million people) has nearly a million more residents than Kansas City (1.6 million), it has fewer golf holes (1,125) than its cross-state rival (1,161). St. Louis is ranked a lowly 289th among U.S. metropolitan areas in the per capita supply of golf holes.

"I don't know why that is," said William Wells, executive secretary of the Missouri Golf Association. "There just doesn't seem to be the interest in St. Louis that there is in Kansas City."

St. Louis District Golf Association Executive Director Larry Etzkorn believes the conservative nature of his city's investors

dampens the enthusiasm of developers.

"Kansas City has been more progressive in the past decade," said Etzkorn. "St. Louis is more of a follower."

"The bankers control the money here. They like to wait and see what happens elsewhere before trying something. In Kansas City it's more of a 'Let's Go' attitude. You may stumble occasionally with that attitude, but you get more done, too."

A high local tax rate that supports what Etzkorn characterizes as a "Triple AAA" St. Louis County school system also discourages some developers, he added.

Consequently, most new courses are be-

ing built on the city's outskirts, said Etzkorn. Among them, he said, are Boone Valley in Augusta, Whitmore Hills in St. Charles County, The Country Club at the Legends in Eureka, Deer Creek and Raintree in Jefferson County, and two new courses in St. Albans that members of Cherry Hills Country Club are receiving from a developer in exchange for their course. Eagle Springs and Spirit of St. Louis are two St. Louis County courses in the planning stages.

"We need golf courses," said Etzkorn. "A lot of people are looking to build. You need starting times everywhere, just like Chicago. Any new course would probably go."

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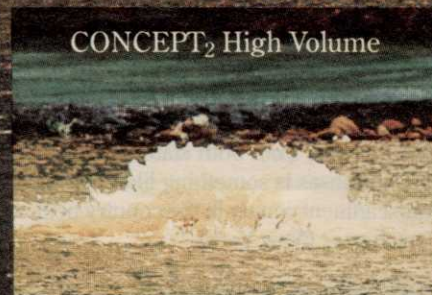
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☐ b. Green Chairman ☐ f. Owner/CEO ☐ j. Others allied to field
☐ c. Director of Golf/Head Pro ☐ g. Builder/Developer

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☐ 7. Golf Course Builder
☐ 8. Other, please specify _____

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☐ b. 18 holes ☐ e. Other, please specify _____
☐ c. 27 holes

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☐ 3. \$100,000-\$249,999 ☐ 7. Over \$1,000,000
☐ 4. \$250,000-\$499,999

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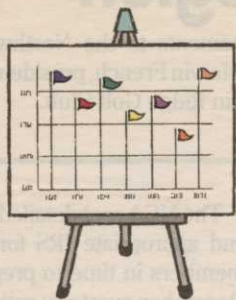
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Briefs



FIRM TO FOCUS ON CAROLINAS

Gary Schaal, PGA national secretary, has formed Palmetto Golf.

The Spartanburg, S.C., firm of which Schaal is vice president will specialize in acquisition, management, consulting and development of golf properties. The group of five partners will focus on properties in North and South Carolina.

Other partners are Skip Corn, Jay Hammond and Ben Hines, all of Spartanburg, and Will Mann, Chapel Hill, N.C.

Palmetto Golf now is involved in six golf courses in the two Carolinas, acting as managers, course owners or consultants.

PGO HIRES MARKETER

The Pennsylvania Golf Course Owners has hired William C. Bowen to visit prospective member courses and meet with current members.

Bowen, who retired in 1987 after a career with Westinghouse, has done consulting assignments for Westinghouse and managed the tennis facilities at Youghioghenny Country Club in White Oak, Pa. He is a graduate of the University of Pittsburgh with a degree in business.

KRAUSE A MASTER PRO

Scott F. Krause, owner/manager and head PGA professional at Muskego Lakes Country Club, in Muskego, Wis. became the 77th PGA master professional, and first from Wisconsin, among some 13,000 PGA members and apprentices.

Krause chose the fields of The Rules of Golf, Teaching, and Buying/Leasing of Golf Courses as his areas of study for his master's thesis. His thesis was a complete golf course valuation analysis and operational plan for an existing facility within a residential community.

Krause is a board member, co-founder and past president of the national Golf Course Association. He is also a co-founder of the Wisconsin Golf Course Association and a speaker at various golf industry conventions and seminars.

RMA HIRES ADAMS

PHOENIX, Ariz. — Becky Adams is the new director of retail at Resort Management of America (RMA), a company specializing in the operation and management of golf courses and resorts.

She will manage golf shops for Stonecreek, The Golf Club, and the Karsten Golf Course at Arizona State University. She also will coordinate retail responsibilities at other RMA projects.

Henry DeLozier, RMA president, believes hiring a director of retail to oversee more than one facility is a trend of the future. "The economic base for retail merchandising in the golf shop industry is tremendous. Adams has been a leader," he said.

Women's issues a major concern

Experts warn golf industry of shortcomings in attracting ladies

By Mark Leslie

Shifts in the workforce will "dramatically" increase the spending power of women, but the golf industry must address some major shortcomings in order to attract this huge number of potential clients, according to various experts.

Ladies Professional Golf Association President Judy Dickinson, LPGA Teaching Division Director of Education Betsy Clark, professional Shirley Englehorn, Market Facts Inc. Chairman and Chief Executive Officer Verne Churchill and others agreed at Golf Summit 90 that the industry has failed to effectively draw women into the sport.

Women could bring tens of millions of dollars into golf courses' pockets if some crucial needs are met, the experts told the 600 attendees at the Palm Springs, Calif., event.

Speaking on a panel on women's golf, Dickinson said: "The U.S. is about to undergo a dramatic shift in the composition and quality of its workforce... The prediction is that two-thirds of the workforce will be women starting or returning to work. It is also projected that only 9.3 percent of all new workers will be male, white, non-Hispanic and U.S.-born men from whom traditionally nearly all our top corporate man-

agers have sprung."

She said more women will be moving up the corporate ladder. "Consequently, we believe women will not only have a larger portion of the economic pie and increased spending power, but will also have a greater political influence."

Churchill, whose firm surveyed 1,300 women golfers for the LPGA, found that though women play only 18 percent of the total rounds in the country, frequent women golfers play more, travel more and spend more than frequent male golfers.

The shortfall, he said, is that while women constitute about 40 percent of all new golfers each year, three of four new female starters have failed to stay in the sport. Whereas 4 million women have taken up golf in the last five years, he said, the net growth has been only 1.4 million because so many have dropped it.

"For the good of the game and the industry, it's important to find out why and what we can do," Churchill said.

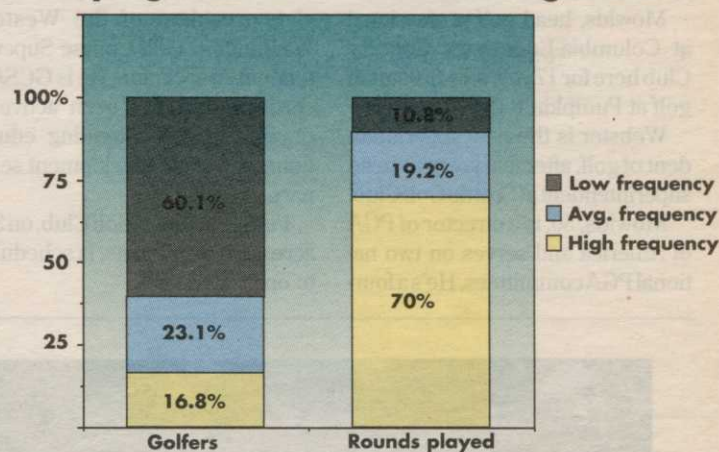
He and other panel members had their own suggestions on how to attack the problem.

Churchill recommended:

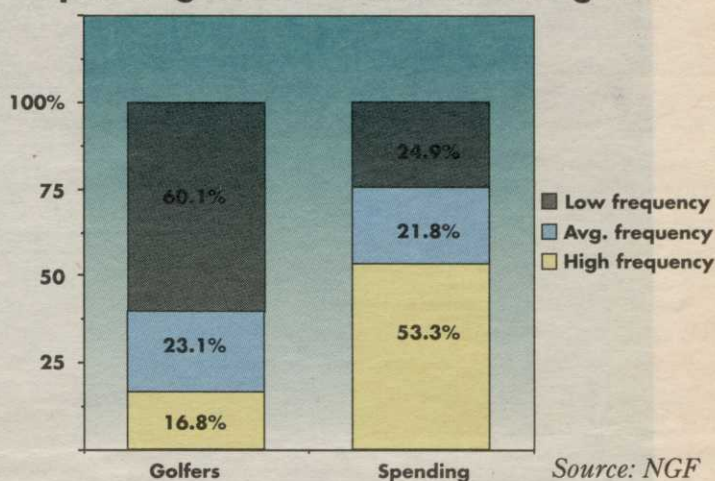
- Helping women improve their performance. "Three of five are dissatisfied with their game

Continued on page 34

Playing habits of female U.S. golfers



Spending habits of female U.S. golfers



Source: NGF

Public course officials nationwide cited for promotional programs

JUPITER, Fla. — Public golf courses have "risen to the challenge" of promoting golf, and the National Golf Foundation has recognized 50 facilities and municipalities for those efforts.

Each facility will receive the NGF's Public Golf Achievement Award for 1990, created last year to underscore the importance of public golf to the growth and enjoyment of the game in America. Upwards of 70 percent of all rounds played are at public facilities.

NGF President and Chief Executive Officer Joseph F. Beditz said the "impetus for the new awards program has been the reports which

the foundation receives each year on how public courses are developing new and imaginative ways to promote play."

The NGF launched its awards program last June by asking member facilities to share their best promotional and operational programs.

"The submittals show that public courses have indeed risen to the challenge," Beditz said. "The reflect pride in their accomplishments and the NGF is proud to recognize them."

Arizona — The Public Golf Achievement

Continued on page 35

Most golf played at public links

Upwards of 70 percent of all golf rounds are at public facilities, according to National Golf Foundation figures.

Conscious of this swing to municipal control, the NGF has cited 50 facilities and municipalities across the United States for excellence in promoting public golf in their communities.

California, with seven, and Florida, with six, led the new Achievement Awards program.

Joseph F. Beditz, NGF president and chief executive officer, said the NGF receives reports each year on new and

Continued on page 35

U.S. Golf Properties buys Shalimar Pointe, will remodel

SHALIMAR, Fla. — U.S. Golf Properties of Nokesville, Va., has bought Shalimar Pointe Golf and Country Club. The purchase adds to the growing list of private, semi-private, and public golf courses operated by U.S. Golf Properties in Virginia, Maryland, Pennsylvania and Florida.

U.S. Golf Properties plans major renovations to the clubhouse area, including enlarging the golf professional shop, remodeling the club's food and beverage operation, new restrooms, adding lockers, and adding a parking lot and golf car storage building.

Shalimar Pointe Golf and Country Club was designed by Fingers, Dye & Shirley, of Houston. Located on Choctawhatchee Bay,

the 18-hole championship course winds through white sand dunes and tall pines.

Heading up the management team at Shalimar Pointe will be club manager Robert Intrieri, a PGA master professional with more than 20 years experience in the golf course industry. Intrieri is coming to Shalimar Pointe from Penn State Golf Club, a 36-holes facility at Pennsylvania State University in University Park, where he was director of opera-



ACQUISITIONS

tions for six years.

While at Penn State, he initiated the idea of a golf management degree between the PGA of America and Penn State, which will begin with the fall 1991 program.

Shannon Shelton, a golf professional in the Apprentice Program of the Middle Atlantic PGA, is the golf professional at Shalimar. Shelton has six years experience, the last 2 1/2 as the pro at one of U.S. Golf Properties' public courses playing over 51,000 rounds per year.

John Kennedy is greens superintendent. He has 11 years experience, the last six at Mangrove Bay Golf Course in St. Petersburg, Fla.

New Portland course brings aboard leaders in region

PORTLAND, Ore. — Jerry Mowlds and Bill Webster have accepted positions at the new Pumpkin Ridge Golf Club, a 36-hole championship facility under construction near Portland.

Mowlds, head golf professional at Columbia-Edgewater Country Club here for 17 years, is director of golf at Pumpkin Ridge.

Webster is the new superintendent of golf, after five years as head superintendent at Seattle Golf Club.

Mowlds, 50, is a director of PGA of America and serves on two national PGA committees. He's a four-

time winner of the Pacific Northwest PGA Golf Professional of the Year award, and in 1984 was named National PGA Golf Professional of the Year.

Webster, 34, recently served as vice president of the Western Washington Golf Course Superintendent Association. He is GCSAA-certified, and has been active in organizing and attending educational and crew development seminars.

Pumpkin Ridge Golf Club, on 350 acres in North Plains, is scheduled to open in the fall.

Mowlds and Webster will head operations at both 18-holes courses at Pumpkin Ridge — one public, one private. The facility will not feature an adjacent housing development, tennis courts, swimming pools, or any other of the country club accoutrements normally associated with golf courses.

"We're extremely happy to have Jerry and Bill on board. They're as excited about this project as we are. With their help, we know we will be able to follow through on our commitment to creating the finest golf facility around — one

that will help meet the demand for public and private golf in the Portland area and attract major tour-

naments to the Northwest," said Marvin French, president of Pumpkin Ridge Golf Club.

NCA

Continued from page 1

annually, according to the NCA. "We consider this a great victory," said NCA Marketing Director Legare Van Ness. "It's one of the few victories ever for tax-exempt organizations with the IRS. A lot of tax-exempt pundits said we never had a chance of getting an abatement in this case."

The NCA sent detailed guidance and appropriate IRS forms to its members in time to prepare their December quarterly estimated tax deposits.

"We're suggesting clubs get their tax attorneys' and accountants' input in filling out the forms. They're complicated and not for tax amateurs," said Van Ness.

The Supreme Court's Portland decision last summer settled a nine-year battle between the IRS and NCA involving a complex rule allowing social clubs to offset losses from selling food and beverages to non-members against income from investments.

The IRS won the case, making it a perfect 18-for-18 in tax-exempt rulings before the Supreme Court. But the IRS abatement softens the blow.

The IRS said for tax years ending before the Portland Golf Club opinion on June 21, 1990, private clubs will escape estimated tax liability if they filed a Form 990 or 990-T showing net investment income.

The IRS also ruled estimated income taxes paid in the subsequent year must at least equal the tax liability reported on Form 990-T the preceding year.

These instructions from the IRS should cancel all underpayment penalties if the club files a statement that it relied on the *Cleveland Athletic Club* decision for not making estimated tax payments.

"If clubs relied on the Cleveland decision in filing their taxes, which was favorable to writing off losses, then they should not have to pay penalties," Van Ness said.

"The IRS said if clubs submitted a statement that they relied on the Cleveland decision, they will not be assessed fines and penalties. They'd just have to pay the taxes."



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Public play

Continued from page 33

imaginative ways public courses are promoting play. These reports provide information for the selects.

The program, launched last June, asked NFG member facilities to share their best promotional and operational programs using these categories: group promotions, speed-of-play programs, instruction, tee-time reservation systems, off-peak hours promotions, course pride programs, methods of increasing capacity, course maintenance, golf shop innovations and family golf programs.

"Public facility operators have risen to the challenge of meeting increased (playing) demand while maintaining game enjoyment," Beditz said.

Awards

Continued from page 33

Award winners are: Marriott's Camelback Golf Club (daily-fee) in Scottsdale Joe Shershenovich, Marriott/director of golf; and Desert Hills Golf Course (municipal) in Yuma, Jim Harland, park superintendent.

California — Riverside Golf Course (municipal) in Fresno Mike Catanesi, PGA pro, Gary Rodgers, agronomist; Menifee Lakes Country Club (daily-fee), Rick Bartlett, assistant pro; The Colony Country Club (daily-fee) in Murrieta, Jim Christie Jr., director of golf; Table Mountain Golf Course (daily-fee) in Oroville, Ron Anderson, PGA pro; Marriott's Desert Springs Resort (daily-fee) in Palm Desert, Steve Phelps, head pro; and Rancho Bernardo Inn (daily-fee) in San Diego, Tom Wilson, director of golf.

Colorado — Foothills Metro Recreation & Park District (municipal) in Lakewood, Dan Hylson, manager of golf; and Raccoon Creek Golf Course (daily-fee) in Littleton, Jack Wilcox, director of golf.

Connecticut — Orange Hills Country Club (daily-fee) in Orange, Judy Smith/Joel Grillo, managers.

District of Columbia — East Potomac Park Golf Course (daily-fee), Leigh Taylor, PGA

Florida — Brevard County Board of County Commissioners (municipal) in Melbourne Beach, Mike Skovran, professional/manager; Marriott's Orlando World Center (daily-fee), Troy Sprister, head pro; Metro West Country Club (daily-fee) in Orlando, Brad Haver, head pro; Mangrove Bay Golf Course (municipal) in St. Petersburg, Jeff Hollis, director of golf; Twin Brooks Golf Club (municipal) in St. Petersburg Jeff Hollis, director of golf; Sandridge Golf Club (daily-fee) in Vero Beach, Bob Komarinetz, director of golf.

Idaho — Shadow Valley Golf Course (daily-fee) in Boise, Judy Hutt, manager and Betty Stadler, owner.

Iowa — Finkbine Golf Course (daily-fee) in Iowa City, Lynn Blevins, golf director; Briggs Wood Golf Course (municipal) in Webster City, Russ Appel Jr., director of golf.

Illinois — Marriott's Lincolnshire Golf Club (daily-fee) in Lincolnshire, Jim Zeh, director of golf; Tamarack Golf Club (daily-fee) in Naperville, John Long, head pro; Peoria Park District Golf Courses (municipal), Shannon McLean, administrative assistant/marketing, Bill Woolard, coordinator of golf maintenance, Candy Guppy, coordinator of pro shops.

Kansas — The City of Overland Park (municipal), Sandy Queen, golf course superintendent; Smiley's Golf Complex and Executive Golf Course (daily-fee) in Shawnee, Dennis Tull, owner/president.

Massachusetts — Green Hill Municipal Golf Course (municipal) in Worcester, Bruce Dobie, PGA/Pro.

Maine — Marriott Sable Oaks Golf Club (daily-fee) in South Portland, Kevin Sackville, head pro.

Michigan — St. Clair Shores Country Club (municipal), Jerry Comeau, manager.

Minnesota — Bunker Hills Golf Course (municipal) in Coon Rapids, Dick Tollette, golf director; Rich Acres (municipal) in Richfield, Mike Lanigan, head pro.

Missouri — Marriott's Tan-Tar-A Resort and Golf Club (daily-fee) in Osage Beach, Thomas Gray, head pro.

Nebraska — Grand Island Municipal Golf Course (municipal), Scott Brunzell, head pro.

New Jersey — Marriott's Seaview Golf Resort (daily-fee) in

Absecon, Kevin Hammock, director of golf; Spring Meadow Golf Course (municipal) in Farmingdale, Ron Fauseit, manager; Somerset County Park Commission (daily-fee) in North Branch, Sarah Hanson, administrator/leisure services.

New York — City of Syracuse/N.Y. Department of Parks & Recreation (municipal), Gerald Wilcox, commissioner of parks & recreation, William O'Leary, golf program director.

Ohio — Yankee Run Golf Course (daily-fee) in Brookfield, Paul McMullin, professional/owner;

Whispering Pines Golf Course (daily-fee) in Columbiana, Roseann Schwartz, golf pro.

Pennsylvania — Pine Crest Golf Club (daily-fee) in Lansdale, Joe Max, head pro; Pennsylvania Golf Course Owners Association (daily-fee) in Murrysville, Susan Tanto, treasurer; Juniata Golf Club (municipal) in Philadelphia, Jim Kealey, head pro.

South Carolina — Carolina Springs Golf & Country Club (daily-fee) in Fountain Inn, Vincent Huygen, co-owner.

Tennessee — Knoxville Golf Course (daily-fee), Frankie Miller,

office manager; Smyrna National Golf Course (municipal), John Norman Miles, PGA pro/director of golf operations.

Texas — Sothwyck Golf Club (daily-fee) in Pearland, Danny Silianoff, director of golf/general manager.

Virginia — Fairfax County Park Authority (municipal) in Alexandria, Ted Savia, manager.

Washington — Capital City Golf Course (daily-fee) in Olympia, Joe Thiel, professional/owner.

Wisconsin — Muskego Lakes Country Club (daily-fee) in Muskego, Scott Krause.

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Summit experts suggest how to draw women

Continued from page 33

and 33 percent would play more if they improved," he said. Instruction and education are vital, he added.

- Welcoming beginners. Half the women surveyed said they would play more if beginners were made more welcome. Three of five said they would play more if tee times for beginners were established, he said.

- Providing special tee times for women in general.

- Being sensitive to cost. "Special incentives should be considered," Churchill said, adding that 70 percent of those surveyed said they would play more if given free lessons.

Women, he added, should be "viewed and treated with greater dignity."

That feeling was echoed by Clark, a former Ithaca (N.Y.) College professor who runs a golf school for women executives at Graysburg Hills Golf Course in Chuckey, Tenn. Clark said: "Golf esteem and self-esteem must be basic tenets of any solution to sustaining involvement of women in golf."

"We need to create a comfort zone for them so they can feel good about golf, the environment and themselves."

Clark said teaching should focus on skill fundamentals, which help in the transition from practice to play. "We are weakest here," she said.

She said teachers need to improve education about the importance of equipment, and the industry should make it "affordable and appropriate."

Rules and etiquette should also be stressed, she said.

Englehorn, golf director at Redhawk Resort in Temecula, Calif., said golf courses have been too long for women. "Fortunately, more women are getting involved in design," she said.

Englehorn suggested women be taught "from the green backwards to the tee." Juniors, women and beginners should first be taught to chip and putt. The middle-distance and driving games should follow, she said.

Sandra LaBauve, director of LPGA Pilot

A question of self-esteem and golf esteem



'We need to create a comfort zone for them so they can feel good about golf, the environment and themselves.'

— Betsy Clark



'Special incentives should be considered. Women should be viewed and treated with greater dignity.'

— Verne Churchill



'Get classified ads. Tell them, "We're out for fun." We need to say, "I have ladies" and beginners' tees, free instruction... it's simple and fun.'

— Jim Bailey

Programs and a teaching pro at Stonecreek in Paradise Valley, Ariz., recommended that courses start programs to teach females at "a very early age."

LaBauve, who coordinates the LPGA/Girl Scout Golf Program and Junior Girls' Golf Program of Arizona, said girls are generally not motivated by competition, so that kind of pressure should not be put on them.

She told manufacturers they should rework equipment for youths.

"First impressions are everything," she said. The experience "has to be fun."

Transportation to and from courses, social activities, and funding for children who can't afford to play, are all critical to developing the next generation of women golfers, LaBauve said.

Jim Bailey, an investment and golf consultant in Colorado who has operated public golf courses in Denver for 35 years, said: "There's always dead time on a golf course. Go after these ladies who are recreational golfers, who don't want to be tournament golfers."

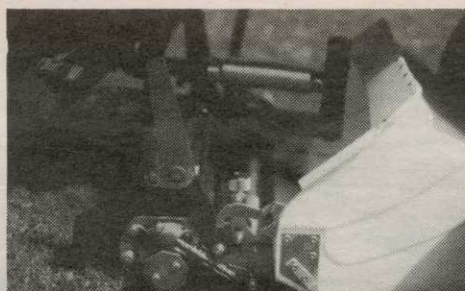
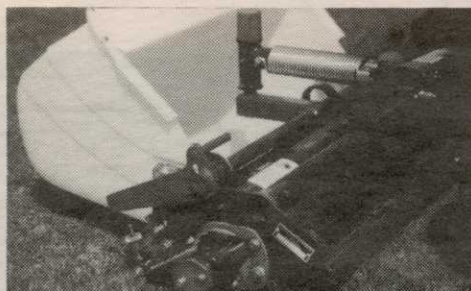
"Get classified ads. Tell them, 'We're out for fun.' We need to say, 'I have ladies' and beginners' tees, free instruction... it's simple and fun.'"

Churchill said when he asked LPGA Teaching Division President Kerry Graham what she wanted to come out of the panel on women's golf "one of her principal goals was for women golfers to be viewed and treated with greater dignity."

"I thought that was a very eloquent expression. It represents not only a noble, but I think an achievable objective for us all. The female golfing population is a terribly important segment whose needs must be better indulged and whose response can produce rewards to every component of the industry."

Churchill said filling those needs will require "thoughtful attention, careful considerations of the options available to equipment manufacturers, facility operators, golf professional organizations and every other important constituent of the industry."

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N.H. developer files for bankruptcy

WINDHAM, N. H., developer Ronald Ruggiero has filed for bankruptcy in connection with a 154-acre, 18-hole golf course he had been building off Londonderry Road in Windham.

Selectman Betty Dunn said the golf course is far from complete, adding that extensive excavation had taken place.

Ruggiero in 1988 said he had invested \$1.2 million in the golf course, and sought tax abatements.

Cows mow course

CEDAR RAPIDS, Iowa — Cows aren't confined to giving milk

Farmer Mack McPhillips uses them to help groom the greens on the 720-acre pasture he's turned into a nine hole layout he calls Cow Party Golf Course.

Last summer, McPhillips dug holes, planted flags, built a bridge, cleared parts of the pasture and induced Bossy to graze lightly on the putting surfaces. McPhillips had plywood signs painted with smiling, winking cows to mark each green.

Timber Creek, which runs through the pasture, provides a natural water hazard. Ravines, tree limbs and holes where trees were uprooted by a tornado serve as sand traps.

NGF film strikes a chord the industry can replay

By Peter Blais

Anyone who saw the film "Our Common Ground" kicking off November's "Golf Summit 90" in Palm Springs, Calif., had to feel a little better about the golf industry heading into the two-day, biennial conference.

The 8-1/2-minute video was designed to "basically cover everything we'd be discussing at the conference," said National Golf Foundation Communications Manager Marty Becker.

While it accomplished that task, the medley of clips showing everyone from Arnold Palmer to Jackie Gleason to Joe Nextdoor swinging a golf club, spiced with some saucy old and new tunes, also left the 600 attendees with a collective smile.

"We were very happy with the way it turned out," said Becker, whose agency was one of 40 sources producers Winch & Partners turned to for footage and music in piecing together the film.

"We've gotten a lot of requests from people wanting to borrow it. We've got about a dozen copies we've loaned out to people who were at the summit."

Because of copyright and union restrictions associated with using existing footage, the film cannot be used for commercial purposes, said Tony Winch, president of Plymouth, Mass.-based Winch & Partners. It can be shown at association or industry meetings, he added.

For those who haven't seen it, "Our Common Ground" opens with shots from some of the country's most scenic courses to the accompaniment of Louis Armstrong singing "What a Wonderful World."

The idea that golf is for everyone is one of the film's main themes. A shot of thirtysomething Arnold Palmer and Gary Player shaking hands followed by a pair of unknown golfers high-fiving one another gets that point across. So, too, do views of children and disabled golfers on the practice range setting up Greg Norman's majestic fairway wood

to a distant green.

"Our Common Ground" is generally upbeat. But it does point out some of the challenges facing the self-proclaimed "Sport of the '90s."

Finding space on already overcrowded courses for the record number of women and junior golfers taking up the game is one issue addressed.

The need for more facilities is brought home by a retired military man who spent years "waiting and waiting and waiting" while in the service. He swore he would never

wait again. But as he and two friends sit dejectedly in a golf car waiting to tee off in the early-morning light at Bethpage State Park Golf Course in Farmingdale, N.Y., he mutters, "Here I am, waiting again."

"Are we facing challenges?" the narrator asks. "Absolutely. Are they insurmountable? Not by a long shot."

That sets up a series of clips, including some incredible shots by a handful of the best-known PGA and LPGA players. The clips of Jackie Gleason hamming it up on

"The Honeymooners" and Lucille Ball doing the same on "I Love Lucy" bring a chuckle.

"But the fun stuff was the public golf footage," said Winch, referring to such clips as a woman dubbing a pitch shot and the startled expression of a man sinking a 35-foot putt. "You don't come across much footage of ordinary people playing. It's fun to see the amateurs hacking away like the rest of us."

Winch's firm spent three weeks collecting tapes. The NGF was the major contributor. Others included

all three major television networks, shoe companies, record companies, ball manufacturers, Golf Course Superintendents Association of America, LPGA and PGA.

Winch's firm spent two weeks reviewing and selecting the best footage while writing the script with the cooperation of the NGF. Three days of editing and another two of post-production resulted in the final product.

"We got lots of cooperation from the industry. That's what made it possible," Winch said.

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Construction, not market, delaying project opening

Delay in completion of two golf courses being built at the Newport Coast hotel and residential resort neighborhood between Newport Beach and Laguna Beach is not tied to a dramatic drop in home sales in California and in Orange County.

An Irvine Co. spokesman said there was too much work to do at the giant development, which eventually will have 2,600 homes, to finish both courses at the same time.

Originally, the golf courses were to open in July 1991. Now the course nearest the ocean will open late next summer. The second, a canyon course, will open later.

Muirfield selected as best conditioned on the Tour

Continued from page 1

Muirfield superintendent Mike McBride credited his staff with keeping the 7,116 yards of bentgrass greens, tees and fairways in peak condition the entire season.

"They're very proud of the course," said McBride of his 20-member crew, which swells to 30 during tourney week. "I have a great crew that really takes pride in having the best-conditioned course on the Tour."

As tourney time approaches, McBride takes on extra responsibilities, not the least of which is

coordinating television coverage.

Muirfield began installing underground television cables in 1976, McBride said. The course is underlaid with wires from holes five through 18 and could have complete coverage in time for the 1992 U.S. Amateur, he added. That means no unsightly wires or radio-frequency cameras marring the scenery.

Muirfield also has specially built television towers on hand, eliminating the need for scaffolding.

"The course was designed with the tournament in mind," McBride

said. "We want the television audience and the spectators to have a great view of every shot and to keep things as tidy as possible."

Being named the top course by such a discriminating panel is no small feat, especially considering the heavy rains and occasional snow that frequent the Columbus area when the pros visit in mid-spring.

There was snow on the ground the day before the tournament started two years ago, McBride said. Last spring the Memorial was shortened to 54 holes for the first time in its history when heavy rains forced can-

cellation of Sunday's final round.

"We don't have June, July and August to prepare the course like other tournaments do," McBride said. "We have to utilize every moment of sun in the spring to get ready."

While McBride tries to peak the course for the Memorial, the season doesn't end there. Only \$150,000 of his \$750,000 annual maintenance budget is devoted to the tournament. The rest goes to keeping the course in shape for the locals.

"We try to maintain it at tournament level all year," McBride said. "We don't have different standards for

the pros and our local players. We might not mow quite as often. But cutting heights stay the same. The grooming everywhere stays the same."

Many of the pros had a difficult time choosing between Muirfield and Butler.

"It's not fair to have to select one over the other," said more than one.

"Butler is always perfect," said Joey Sindelar.

"It's too bad we're going to lose it," added Bill Buttner, referring to the club's decision not to hold future Tour events rather than open its membership policies to Tour scrutiny in the wake of Shoal Creek.

Caves Valley developer draws fire

Heavy summer rains and insufficient safeguard by a new private golf course developer may have combined to "drown" in a sea of mud a natural trout stream in northwest Baltimore County.

County officials have directed Whiting-Turner Contracting Co., the firm building the Caves Valley Club, to restore the unnamed meandering tributary of the north branch of the Jones Falls.

Robert W. Sheesley, county director of environmental protection, cited failure of developers to maintain sediment and erosion controls for six to eight inches of mud that blanketed nearly a half mile of the stream.

The silt from the golf course construction covered the gravel bottom that trout need to lay their eggs.

Sheesley said stream damage could be corrected easily by removing the silt.

Leslie B. Disharoon, who is overseeing the \$32 million project, wouldn't discuss stream damage or anything related to the course.

William Pistell, former local president of Trout Unlimited who lives near the project, blames the stream damage on extensive land-clearing for the golf course. He said 174 acres were bared. Gas and power line construction also contributed sediment to the stream bottom, Pistell said.

Hopes stirred for muni course

BRIDGEWATER, Mass. — There yet may be an 18-hole municipal golf course here.

A reorganized Bridgewater Golf Study Committee chaired by Dennis Weingartner is seeking new proposals for a course on the town-owned Chaffee Farm off Vernon, Pine and Spruce streets.

Focus will be on a course with a modest clubhouse facility, practice range and putting area.

Weingartner said, "It is our hope to generate additional revenue to the town." Last year, plans for a course were dashed by the economic downturn.



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Representative Projects: Dove Canyon Country Club, Orange County, CA, Jack Nicklaus Golf • Tomisato Golf Club, Narita, Japan and Imperial Wing Country Club, Nagoya, Japan, J. Michael Poellot Golf Design Group • Kinojo Country Club, Okayama, Japan, Robert Trent Jones II • Wood Ranch Country Club, Simi Valley, CA • Palm Valley Country Club, Palm Desert, CA • Art Lake Golf Club, Osaka, Japan, Golf Plan Incorporated

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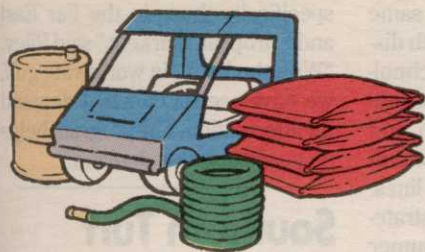
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Briefs



CENTURY RAIN AID DOUBLES SPACE

FT. MYERS, Fla. — Century Rain Aid of Madison Heights, Mich. has more than its doubled operation here by purchasing a new and larger facility.

The Ft. Myers branch is one of seven CRA distribution centers in Florida.

Mike Essenwein, regional vice president, said the new facility is located in a commercial area where minimum traffic congestion exists providing easier and faster access and service to customers.

KEELER APPOINTED REDMAX VP

NORCROSS, Ga. — John Keeler has been named RedMax's vice president of sales and marketing.

Prior to his promotion, Keeler was RedMax's national sales manager.

RedMax, a division of Komatsu Zenoah, manufactures yard and garden equipment.

ET-NOW ATMOMETER CITED

Agricultural Engineering Magazine chose the ET-Now electronic atmometer by Automata, Inc. of Grass Valley, Calif., as one of 50 most outstanding innovations in agricultural product or systems technology developed during the past year.

When used as an irrigation scheduling tool, ET-Now can help in minimizing water and energy usage by irrigating only when needed.

This is Automata's fourth "AE 50" award winner in the past six years.

PICKSEED NAMES RESEARCH AGRONOMIST

TANGENT, Ore. — Donald J. Floyd, has been appointed research agronomist by Pickseed West, Inc.

Floyd, 32, who holds a master's degree from Oregon State University, brings extensive turfgrass breeding and research management experience to the Pickseed research program.

He will work with research director Dr. Jerry Pepin in developing cool-season turfgrass varieties, and will assume supervision of Pickseed West's Oak Knoll Research Farm, where an extensive collection of promising breeding material is available.

LOPEZ REPRESENTING FINE LAWN



N. Lopez

DUBLIN, Ohio — Fine Lawn Research, Inc. has announced that pro golfer Nancy Lopez has joined the Fine Lawn team. She was officially introduced as the company's spokesperson at Fine Lawn's biennial distributor meeting at the Rancho Bernardo Inn in San Diego.

Since her debut on the LPGA Tour, Lopez has claimed 42 victories. In 1978 she set a record-breaking five titles in a row.

Fine Lawn Research, Inc. produces and markets proprietary turfgrass seeds.

Japanese firm buys Fermenta's SDS

MENTOR, Ohio — ISK Enterprises, Inc., a subsidiary of Ishihara Sangyo Kaisha, Ltd. of Osaka, Japan, has bought SDS Enterprises, Inc. from Fermenta AB of Stockholm, Sweden, for approximately \$300 million.

According to SDS President Franklin S. Barry, "The acquisition by ISK is indicative of its objective to maximize return on investment in new technologies. ISK's excellent track record in research, combined with our strength in product development, registration, and marketing, result in an integrated orga-

nization with worldwide reach."

SDS Enterprises, Inc. has one wholly owned subsidiary known as SDS Biotech Corp.

SDS has two wholly owned operating subsidiaries — Fermenta ASC Corp. and Ricerca, Inc. Fermenta ASC Corp. — based here, has production facilities near Houston, and manufacturers and markets a variety of agricultural and specialty chemical products.

Ricerca, Inc. is a research and development company that provides broad-based technical services to clients. Its facilities are located in

Concord Township, Ohio.

ISK intends for these two companies to continue to operate in the same manner.

Barry said customers served by the two units will benefit from several new products to be introduced by ISK in the near future.

ISK, one of the world's leading producers of titanium dioxide, also develops, manufactures, and markets agricultural chemicals as well as magnetic materials. Its 1990 sales totaled \$800 million, including the sales of its subsidiary companies.



European superintendents study U.S. turf practices.

European superintendents learn American ways from companies

American soil was uprooted in a good cause by 80 European golf course superintendents and officials.

The group, from Germany, Austria, Switzerland and Spain, spent two weeks touring — and playing — several U.S. golf courses. The trip, sponsored by ORAG International, one of Europe's largest turf equipment distributors, Jacobsen Textron and other U.S. manufacturers, gave participants first-hand information on turf management techniques here.

ORAG President Hans Wust said: "In the United States, a lot of the population is involved in golf, so there is a wealth of knowledge and experience. It's good for us to know how Americans maintain and invest in the golf business. Our people were very thankful

for all the information and recommendations from your superintendents. And product application knowledge from companies like Jacobsen will help them improve their courses."

Wust said European golf organizations have made great strides in educating superintendents, but added that it will take time to catch up to U.S. counterparts. He feels language barriers and restrictive environmental laws have slowed the progress of the game on the continent.

During their stay, European superintendents met with superintendents, agronomists and manufacturers, and played golf in Wisconsin, Minnesota, Kentucky, North Carolina and Florida.

Hit purchases Oasis Control's assets

LINDSAY, Calif. — Hit Products Corp. has bought the assets of Oasis Control Systems, a manufacturer of electronic devices for governing irrigation systems.

Marketed nationally and internationally since 1988, Oasis features the ability to plug in a module and create any station configuration desired.

The Oasis line joins with the existing line of sprinklers and valves and teams up with Procode, a two-wire solar-powered control

method, and Cintech, a computer-controlled master/satellite system.

Hit President Paul Cordua and Vice President Bill Vogt started in the irrigation industry in the early 1960s. They formed Hit in 1982.

"Three years ago, Bill and I made a commitment to become a key factor in the turf irrigation industry and this newest acquisition contributes greatly to the fulfillment of that commitment. This is only the beginning," Cordua said.

800 phone number help turf professionals

KANSAS CITY, Mo. — Mobay Corp., Specialty Products Group, has introduced a special toll-free phone number (1-800-842-8020) to fulfill the needs of green industry professionals.

Doug Soper, formerly a Mobay sales representative in Florida, will field questions

regarding Mobay products, various pest and fungus challenges, how to use Mobay's Tempo insecticide on delicate ornamentals, and what methods to use when disposing of used packaging. Callers may also order product information such as brochures and labels.

Koos, Inc. gets innovative products award

LOUISVILLE, Ky. — Koos, Inc. of Kenosha, Wis., received top honors at the Lawn and Garden Show for its new 12-pound jug of Safe Step Icemelter. The Innovative Products Award was presented to Koos here at the national trade show in late summer.

Lawn and Garden Marketing Magazine selected 10 winners of the award from more than 50 entries. The products were judged by experts in marketing/packaging, merchandising/retailing, and lawn/garden retailing. They were chosen on the basis of appearance, ease of operation, safety, value for investment, effectiveness and innovativeness.

Safe Step's 12-pound jug is also easy to handle because the container only needs to be tipped slightly, not completely inverted. The spout is large enough that it can be opened with a gloved hand on cold winter days. There are three opening positions — full, one-half, and one-fourth — making it easy for users to regulate the exact amount of granules needed.

The container is made of a PETG plastics material and the cap is made of polypropylene. Both materials are durable and are able to withstand extremes of heat and cold. PETG also has excellent moisture barrier properties.

Commercial Pump redesigns system to modular format

SWANTON, Ohio — President Lee Dunbar said Commercial Pump Service's automated pump systems will be built using a modular format.

"That is, each component is pre-engineered to work with all other components in the system. It really isn't much different than the way we've always built pump systems, but we did spend a great deal of time redesigning component-to-component connections," Dunbar said.

The redesign will have "a tremendously positive impact on our clientele across the board. It will be much simpler to build systems (even custom systems), to install them and to maintain them," he added.

Startup, pre-testing and setup of controls can now take place in Commercial Pump's plant.

"We see this concept as a unique solution to the problem of spiraling costs. We can maintain costs and still provide a better product with better and faster service," Dunbar said.



Korbin Riley, right, international business manager of Scott's Professional Business Group, presents the first diploma of Scott's new training program to David Worrad, group technical manager of Chemspray PTY, Ltd. of Australia. Eugene Mayer, left, PBG senior training manager, looks on.

Overseas partners get training at Scott HQ

MARYSVILLE, Ohio — The Professional Business Group of The O.M. Scott & Sons Co. has introduced an international technical training program for its overseas distributing partners.

Korbin Riley, international business manager of PBG, said the program is designed for management-level and technical sales personnel of the overseas partners.

The six-day seminar includes a tour of Scott headquarter offices, research facilities, test plots, chemical production plant and quality assurance labs.

Attendees are given the same basic training — from in-depth discussions of Scott fertilizer technology to soil-testing training, pesticide research, turfgrass research and mechanical product research in relation to the Scott's product lines.

Advertising and market strategies, an overview of the consumer market and the challenges of customer service and product registration issues are also addressed.

"The initial reaction to the program has been overwhelmingly positive. We plan to expand and utilize it with all of our distributors,

specifically those in the Far East and European markets," said Riley. "With the boom in worldwide golf, we have seen a constant demand for information. The program helps us to address this demand."

Southern Turf Nursery gains Fibresand pact

NORCROSS, Ga. — Southern Turf Nurseries has signed an agreement with Fibresand, Ltd., of Mansfield, England, to sell and install Fibresand, a specially formulated surface for equestrian sports.

Southern Turf Nurseries, said to be the world's largest producer and installer of government-certified hybrid Bermudagrasses, will distribute and install Fibresand in 11 Southeastern states.

Previously, Fibresand was available only in Europe, where, the past six years, more than 70,000 cubic yards have been installed.

Fibresand consists of clean, free-draining silica sand, reinforced with synthetic fibers. Southern Turf Nurseries said this formula provides a forgiving yet consistent surface when under load from horses' hooves, and can be installed indoors or outdoors.

Outdoor installations are applied on top of a free-draining base to expedite and control water drainage.

Kopf back as Jensen VP for design

DENVER — Thomas Kopf has rejoined David Jensen Associates as national land planning and market research firm's vice president in charge of design.

The last 2 1/2 years, Kopf was director of planning for Bloodgood Architects & Planners, Des Moines, Iowa. He will be responsible for project management and design for DJA's projects throughout the country.

Warren's hires Rundle as controller

CRYSTALLAKE, Ill. — Warren's Turf, Inc. has hired Mark Rundle as controller.

Rundle, who comes to Warren's from Ganton Technologies of Racine, Wis., has experience in both private business and public accounting. He holds both bachelor's and master's degrees from the University of Illinois.

Ward at Milorganite

MILWAUKEE — The Milorganite Division of the Milwaukee Metropolitan Sewerage District has named Terry Ward manager of advertising, promotion and training.

Ward has several years experience in the professional turf and lawn and garden industries. Milorganite makes natural organic fertilizer.



High Pointe GC in Traverse City has everything...heat, cold, snow, rain, wind, shade, traffic and Oregon Grown Fine Fescue.

High Pointe GC in the resort town of Traverse City, Michigan, is exposed to extremes of nature and man. This course demands a great deal from its turfgrass... that's why it's wall-to-wall Oregon grown fine fescue.

Architect Tom Doak desired a links-type course with low maintenance qualities. Fine fescue filled that bill. Now, superintendent Dan Pillard finds that thousands and thousands of dollars have been saved establishing the turf, and in maintenance costs, over other species.

And since it's from Oregon grown seed, they know the turf will stay manageable, predictable and playable.

For a series of tech sheets on Oregon Grown Chewings and creeping red fescues, call or write:



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Mobay moves include Braness as research coordinator

Mobay Corp. has announced several personnel moves, including hiring Dr. G.A. "Gary" Braness as the Specialty Products Group's research and market development coordinator for pest control and turf and ornamental products. Braness will cover the Western United States, and will be based in Fresno, Calif.



G. Braness

The Specialty Products Group also added sales representatives Lee Bloomcamp in south Florida; Randall Davis in south Texas; Jack Hoxie in Georgia, Alabama and east Tennessee; Jon Stewart in the New Martinsville, W. Va., area; and Trey Turner in Florida.

Braness recently received a Ph.D. in urban and industrial entomology from Purdue University. He was awarded a master's degree in entomology at North Dakota State University and earned a bachelor's degree in biology at St. Cloud (Minn.) State University.

Between receiving his master's and Ph.D., Braness owned and operated a pest control company in Wahpeton, Minn., for seven years. Before joining Mobay, Bloomcamp was pest control manager for the University of Florida-Gainesville, where she had worked since 1983. While at the University, Bloomcamp earned a master's degree in entomology. She also holds a bachelor's degree in crop protection from Kansas State University.

Before joining Mobay, Davis was regional sales manager for Paragon Professional Pest Control, where he had worked since 1984. Davis holds a bachelor's degree in journalism from the University of Wisconsin.

Hoxie has been a sales representative with Velsicol Chemical/Roussel Bio Corp. He holds master's and bachelor's degrees in education from Central Connecticut State University.

Serving with Mobay since 1977, Stewart has served as senior technician for the environmental control lab (1990); lab technician (1986-1990); and analyst, technician and shift leader for the quality assurance lab (1977-1986).

Before joining Mobay, Stewart was a field representative for the West Virginia Department of Agriculture until 1977. He holds a bachelor's degree in biology from West Virginia University.

Before joining Mobay in February, Turner was assistant superintendent for Preston Trail Golf Club in Dallas, Texas.

Turner received a bachelor's degree in agronomy from Texas A & M University.

Ransomes directors visit their newest acquisition in U.S.



Market Manager Clarke Staples, back to, give Ransomes plc directors a hands-on look at Cushman and Ryan equipment in Lincoln, Neb.

Members of the Ransomes plc board of directors recently broke with tradition.

They traveled to the United States for a board meeting at Cushman headquarters, Lincoln, Neb.

It was the first time in the 200-year history of Ransomes that the board had met outside Ipswich, England.

According to Stu Rafos, the meeting signified a commitment to making the Ransomes America companies the leading force in each of their markets.

Board members toured

Cushman plant facilities and heard presentations on new product developments from both engineering and manufacturing staff members.

They also reviewed progress on the 120,000 square foot plant addition underway at Cushman.

Board members coming to Lincoln included chairman H. A. Whittall, Geoffrey Comer, R. L. Dodsworth, A. D. Cameron, R. T. Ashwell, E. D. J. McCoy and Helmut Adam, president of Ransomes, Inc., Johnson Creek, Wis.

With All The Abuse Your Turf Takes, Who Needs Root Pruning?



You know the story. The guys who swing an iron the way a lumberjack wields an ax are the same guys who yell the loudest when weeds give them a bad lie. So, with all the abuse your turf takes, the last thing you need is root-pruning from your herbicide. That's why you need CHIPCO® RONSTAR® brand G herbicide. University root pull studies show that CHIPCO® RONSTAR® G works without pruning turf roots. That means healthier roots and stronger, more durable turf. Best of all, just one pre-emergence application provides season-long


control of 25 tough broadleaf and grassy weeds—including goosegrass, crabgrass and Poa Annua.

You'll also appreciate the fact that CHIPCO® RONSTAR® G won't leach out or move laterally through the soil and is labeled for use on a wide variety of ornamentals, so you can keep more of your course weed-free with each application. CHIPCO® RONSTAR® brand G herbicide. It can't improve the quality of play on your course, just the quality of weed control.



Chipco® Ronstar® G

Brand Herbicide

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CIRCLE #133/GCSAA BOOTH #830

Rhone-Poulenc Ag Company, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709. For additional information, please call: 1-800-334-9745. As with any crop protection chemical, always read and follow instructions on the label. CHIPCO and RONSTAR are registered trademarks of Rhone-Poulenc. © 1990 Rhone-Poulenc Ag Company.

Agricultural engineers give award to Irrrometer

RIVERSIDE, Calif. — The Irrrometer Co., Inc. has received the American Society of Agricultural Engineers' "AE50" award for its new Watermark Four-Zone Moisture Control Panel, introduced in late 1989. A panel of nationwide engineering experts made the choice.

The "AE50" award is given to honor "outstanding innovations in product or systems technology." The Four-Zone Moisture Control Panel is based on the company's soil moisture sensor, and is used to interface this non-maintenance sensor with any standard 24-Volt AC automatic irrigation system

control.

It provides for precise irrigation scheduling based on actual soil moisture readings in the irrigated area. Benefits include reductions in water use, labor and maintenance as well as healthier turf and plants due to automatic control of soil moisture.

Jacklin Seed initiates Green Seal of Quality program

POST FALLS, Idaho — Turf grass varieties with superior genetic characteristics and which diminish the impact on environment will bear Jacklin Seed Co.'s Green Seal of Quality.

New elevated seed analysis standards must be higher than certified, said Gayle Jacklin, company director of marketing.

Jacklin pointed out that superior genetic characteristics, higher seed

purity, germination and better disease resistance translate into fewer chemicals and less maintenance.

Jacklin Seed has facilities in five states and exports to 42 countries.

Hydro-Scape tabs Robles for turf division award

Juan Robles, who normally works in golf sales "and was just helping out in the turf division" of Hydro-Scape Products Inc., was honored for exceptional sales effort.

Also recognized were Kevin Treft and Doug Chilton.

Hydro-Scape is a single source distributor for major brands of irrigation and landscape supplies and has 12 branches in Southern California.

Robles, a 15-year employee, registered top sales in the turf irrigation division while covering San

Bernardino and parts of Orange County.

A recent staff addition, Treft also was feted in the turf irrigation division. He formerly worked in the wholesale plumbing industry.

Chilton, whose territory covers south Orange County, worked out of the San Diego store while completing his college education. Upon graduation, he was promoted to full time outside sales.

Companies report hirings, promotions

Pickseed agronomist

TANGENT, Ore. — Donald J. Floyd, has been appointed research agronomist by Pickseed West, Inc.

Floyd, 32, who holds a master's degree from Oregon State University, brings extensive turfgrass breeding and research management experience to the Pickseed research program.

He will work with research director Dr. Jerry Pepin in developing cool-season turfgrass varieties, and will assume supervision of Pickseed West's Oak Knoll Research Farm, where an extensive collection of promising breeding material is available.

National sales manager

LIONVILLE, Pa. — British American Marketing Services has appointed Vicki Perrin national sales manager for its line of teakwood outside and inside garden furniture.

Perrin is a graduate of Philadelphia College of Textile and Science with a bachelor of science degree.

Melex field sales reps

RALEIGH, N.C. — Melex USA, Inc., a golf car manufacturer, has hired two new field sales representatives.

William "Carter" Gresham Jr., former general manager of a golf car and turf vehicle distributorship in Hurst, Texas, has been hired to cover Melex sales in Texas. Gresham will work out of Arlington.

Ray Wiezycki will work out of Tampa, Fla. He brings three years experience as a PGA Tour player and 24 years as a class A-1 PGA member. Recently he was with a Melex dealer in sales.

Moyer sales rep

SOUDERTON, Pa. — Moyer & Son, Inc. has promoted Richard Shearman of Allentown to sales representative for the Specialty Fertilizer Division. He will cover southeastern New York, Long Island, southern Connecticut, New Jersey and north-eastern Pennsylvania.

Shearman has been in the lawn-care industry nine years. Prior to his promotion, he served as a commercial account representative in the Moyer & Son Lawn Care Division. He was also involved with management of his family's lawn and tree care company in southeastern New York.

OUR JOB IS KEEPING YOU HAPPY...



So You Can Keep Them Happy.

You can't guarantee them a low score. But keeping your course in the best possible condition is the surest way to bring golfers back. And the full line of The Andersons Tee Time products are proven winners for top flight course maintenance.

Just look at the record. For high quality fertilizers, herbicides, insecticides and

combination products, we're right on top of the leader board. But what really sets The Andersons apart from the pack is product availability, consistency and technical support through our local distributors.

If you want to keep your golfers happy . . . and coming back for more, give us a call. We're professionals committed

to making your job easier. Let us put a smile on your face.

Call toll free, 1-800-225-ANDY for a comprehensive Tee Time Selection Guide.



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New certification studies ready

Effective Dec. 1, the pesticide management section (section IV) of the certification exam will include new questions pertaining to water quality, underground storage tanks, integrated pest management and worker right-to-know, according to the Golf Course Superintendents Association of America newsletter *Newsline*.

Section IV, which will be retitled *Pest Control, Safety and Compliance*, is being revised to address more environmental concerns.

The suggested study material for this revised section, which is available through GCSAA's reference material program, includes three new items:

* *Musts for USTs*, published by the U.S. Environmental Protection Agency's Office of Underground Storage Tanks, summarizes the new regulations regarding technical requirements for underground storage tank systems.

* *Supervisor's Right-To-Know Handbook*, published by Business & Legal Reports, explains the training and follow-up that supervisors (such as golf course superintendents) need to provide workers to comply with the Occupational Safety and Health Administration's Hazard Communication Standard.

* *Standard Pesticide User's Guide*, by Bert L. Bohmont, covers pests, diseases, labels, equipment, calibration,

decontamination, disposal, record keeping, laws and liability. This replaces New Pesticide User's Guide as the pest management study guide for section IV of the exam.

An updated list of suggested study materials for the certification examination may be obtained by calling the GCSAA's education department.

Reference materials can be ordered with the order form in the 1990-91 Member Services Catalog or by calling the membership department at 913-841-2240 or 800-472-7878.

CIRCLE NO. 250

Guide lists many courses

A new golf course directory has been published by Chicago-based Kayar Co., Inc.

The Official 1991 United States Golf Course Directory and Guide lists more than 6,500 private, semi-private and public golf courses across the country.

The 370-page guide provides course name; address and telephone number; pro; number of holes; par; yardage; greens fees; type of course; and amenities (restaurant, lounge, banquet facilities, lodging and driving range).

Courses are listed by name as well as city and state. A map of each state locates the courses.

"Our goal in publishing the guide was to provide the most accurate, up-to-date information about every 18-hole golf course in the country with a par of 65 or greater," said publisher Rick Anesi.

"Our book is inexpensive (\$19.95), completely up-to-date and organized in an easy-to-use format."

A new directory will be published yearly. For information about *The Official 1991 United States Golf Course Directory and Guide* contact Kayar Co., Inc., P.O. Box 31473, Chicago, Ill. 60631-0473 or call 800-628-GOLF.

CIRCLE NO. 252

Lawn system topic of book

The Lawn Institute has released a 40-page booklet titled *The Lawnscape: Our Most Intimate Experience with Ecology*.

The lawn is recognized as a complex ecological system that gives many health and environmental benefits.

The booklet provides an overview including grasses, pests and the living soil.

The Lawnscape can be ordered from The Lawn Institute, P.O. Box 108, Pleasant Hill, Tenn. 38578 for \$5 per copy. The Lawn Institute is a non-profit organization.

CIRCLE NO. 253

NGF updates range manual

A comprehensive new manual on the golf range business has been added to the National Golf Foundation's technical library.

Guidelines for Planning, Building and Operating a Golf Range is a 68-page manual covering all aspects of golf ranges, from determining feasibility to day-to-day operations.

This is the third in a series of range manuals developed by the NGF over the past three years.

It was prepared with the help of more than a dozen range owners, operators, architects and special service suppliers.

Among the contributors was Robert Wittek, president of Wittek Golf Supply Co.

"It's must reading for people at all levels of the range operation," Wittek said. It combines insight about the operation of today's driving range with intelligent, research-based advice that will produce winning results."

Chapters cover permitting, legal and insurance considerations, range layout and construction, lighting, range equipment, operational policies and procedures, marketing, start-up and operating costs, revenue projections and more.

Also included are thumbnail operational profiles of several successful ranges and a list of golf range suppliers.

The manual is available from the NGF and can be ordered by calling 800-733-6006.

CIRCLE NO. 251



A Bed Guaranteed To Give Your Back A Rest.

With Carryall by Club Car, you're working smarter instead of harder. And whether you select our exclusive gravity-tilt cargo bed or the hydraulic-powered option, you'll get a durable vehicle that'll save time and money. Not to mention your back.

Call 1-404-863-3000 for details on how Carryall can do it all for you.



Club Car
Drive It To Work.

New Deere mowers and utility vehicle unveiled

Four new commercial walk-behind mowers and a new two-passenger utility work vehicle are available from John Deere.

The 48- and 54-inch mowers are available with 14- or 17-hp overhead valve engines.

All four models feature infinite cutting height adjustment between one and four inches. Fuel capacity is five gallons. Ground speed can be adjusted to five different settings between 1.6 and 5.9 mph.



John Deere walk-behind mower

Attachments include a five-bushel capacity, plastic-mesh grass catcher and a two-wheel sulky.

Electric start is standard on the 17-hp models. An electric start kit is optional on the 14-hp models.

The 10-hp AMT626 utility vehicle will replace the AMT622 with a machine featuring a 7.7-inch wider stance.

The spacing between the outside of the rear tires on both axles has been increased to 62 inches for greater stability and versatility.

Mid- and rear-axle shafts are longer, larger in diameter and heat-treated for strength. The frame has been redesigned to accommodate the wider axle support. Other features include a pressure-lubricated engine using 1/2-gallon of fuel per hour at full load; and fuel capacity of 4.75 gallons.

For more information call John Deere at 309-765-4459.

CIRCLE NO. 300

Smart new valve by Toro

Toro has released Flo-Pro, a durable valve line designed to ease installation, operation and maintenance.

Flo-Pro features the Toro QuickLink wireless solenoid enabling the controller wires to be slipped straight into the solenoid for an instant connection with complete integrity.

A waterproof gel inside the cap surrounds the contacts, eliminating the need for wire splices and water sealing.

Flo-Pro also has an encapsulated solenoid, with the plunger and other critical parts contained inside so

springs, screws and O-rings cannot pop out. While a full turn of the solenoid yields external bleed, a half-turn activates manual operation with internal bleed downstream.

To simplify servicing, the Flo-Pro valve is constructed with only three primary service assemblies: an encapsulated solenoid, a diaphragm assembly and a bleed tube assembly.

Furthermore, troublesome screws that cause leaks and strip plastic have been eliminated and replaced with hand-tightened, no-leak actuator caps, including electric and electric with flow control models.

The Flo-Pro also comes in six different body styles and each model — barbed, male-threaded, female, slip x slip, globe angle and anti-siphon — can handle each of the cap styles, offering a wide range of design variations.

CIRCLE NO. 306

New upgrades for pumps

Watertronics now offers Electronically Controlled Retrofit Packages that include electrically actuated butterfly valves.

The Retrofit systems are designed to interface with nearly any pump station. Retrofit upgrades provide accurate, consistent pressure regulation for more economical irrigation.

Microprocessor controls monitor all system functions, automatically sequencing pump operation through precise analysis of flow/pressure transducer inputs.

Pump start/stop surges are eliminated with electrically actuated butterfly valves. These valves are dirty-water tolerant and produce less than 1 PSI pressure drop compared with 5 PSI for conventional hydraulic units.

This new technology reduces electrical demand charges and delivers added savings from less in-season maintenance, fewer adjustments and no costly down time.

For more information call Watertronics at 800-356-6686 (in Wisconsin, call collect 414-782-6688).

CIRCLE NO. 307

Insecticide made safer

Biofate, an environmentally safe insecticide, is being produced and marketed by Regal Chemical Co.

Biofate is a granular insecticide said to be highly effective on mole crickets and grubs as well as other turf-damaging insects.

It also controls pesky insects such as ants, fleas and ticks. (including the variety which carries Lyme Disease).

Biofate is produced by impregnating a 100 per cent edible carrier with a highly effective insecticide, then baiting the granules with an attractant.

Insects are lured to the bait and ingest the granules. Ingestion of the insecticide is much more effective than contact or vapor action from or with the insecticide. Biofate is packaged in 30-pound bags.

Contact Regal Chemical Company, PO Box 900, Alpharetta, Ga. 30239; 800-621-5208.

CIRCLE NO. 308

Waiting For Parts Is About As Exciting As Watching Grass Grow.

When you've got a mower down unexpectedly, and you need parts yesterday, ask your distributor about **Direct Today 48 Hour Delivery**. Any part not immediately available will be delivered to you within 48 hours. No minimum. No maximum. No extra charge.



TORO

Direct Today 48 Hour Delivery covers only parts supported by The Toro Company, Minneapolis and does not include irrigation, rider, or certain engine parts. Program subject to carrier delivery restrictions. "Toro" is a registered trademark of The Toro Company, 8111 Lyndale Ave. So., Minneapolis, MN 55420. ©1989 The Toro Company.

CIRCLE #136/GCSAA BOOTH #3001

Power Pruner reduces time and effort

Technic Tool Corp. has introduced the Power Pruner which the company says is the only portable, telescoping pruner on the market.

The Power Pruner is lightweight and equipped with a drive shaft that extends from seven to 11 feet. The design helps reduce the time and effort of conventional pruning and improves operator safety.

Since the tool reaches 17 feet, including operator reach, the cutting chain remains a safe distance from the operator's face and body. Also, cut tree limbs fall far from the operator.

Power Pruner is powered by a 21-cc gasoline engine. The cutting head consists of a 10-inch sprocket nose chain bar, chrome-plated 3/8-inch pitch cutting chain and a patented cutting shoe.

The tool's light weight, just 16 pounds, enables the operator to use the pruner in confined work areas, either from the ground or a bucket truck.

Technic Tool is in the process of expanding the versatility of the Power Pruner. The Circle Saw Accessory is the first of many options planned.

For more information, contact Dale Alldredge or Nancy Keller at Technic Tool Corp., 725 29th St., P.O. Box 1406, Lewiston, Idaho 83501 or call 800-243-9592.

Circle No. 301

Update kit for Ryan aerator

A new "update kit" for Ryan Lawnaire IV aerators is available from Cushman. The kit includes a new axle, and is available to rebuild all Lawnaire IV aerators built through 1990.

Heavily used Lawnaire IV aerators and those used in abrasive soil conditions are prone to wear of axles and bushings. When replacing axle assemblies, owners often fail to replace the felt washers, resulting in additional wear.

For this reason, Lawnaire IV models, new axles with replaceable wear bushings will be installed along with heavy-duty needle bearings. The update kit includes the heavy-duty axle and needle bearings.

Contact Cushman, P.O. Box 82409, Lincoln, Neb. 68501 or call 800-228-4444.

CIRCLE NO. 311

Kalo markets wetting agent

Hydro-Wet RTA, a turf-wetting agent recently introduced by Kalo, Inc., increases soil moisture by reducing run-off and evaporation loss.

This "ready-to-apply" formulation is packaged in a 5-gallon poly jug with a spigot.

For more information, contact Chuck Champion at Kalo, Inc. 4550 W. 109th St., Overland Park, Kan. 66211 or telephone 800-255-5196.

CIRCLE NO. 312



Technic Tool Power Pruner

L-3 series tractor ready

Kubota Tractor Corporation recently added three new models to its L-Series tractor lineup — the L4350, L4850 and L5450.

These 4WD, direct-injection diesel tractors feature Kubota's "Ever Clutch" and long-lasting hydraulic transmission. PTO horsepower ranges from 38 to 49.

The "Ever Clutch," a true wet clutch that virtually eliminates repair costs and downtime losses, is standard on the L4850 and L5450, and a factory option on the L4350.

Hydraulic shuttle transmission is available on all L-3 Series trac-

tors. The L4350 model also comes with a choice of mechanical shuttle transmission.

Other features of the series include hydrostatic power steering, easy checker instrument panel, spacious operator area, greater 3-point hitch lift capacity, increased hydraulic capacities and dual air cleaner.

There's also a wide range of compatible implements, including quick attach front loaders, box scrapers, rotary cutters, backhoes and snowblowers.

Contact Kubota Tractor Corp., 550 West Artesia Blvd., Compton, Calif. 90220; 213-444-7000.

CIRCLE NO. 309

Neary keeps mower sharp

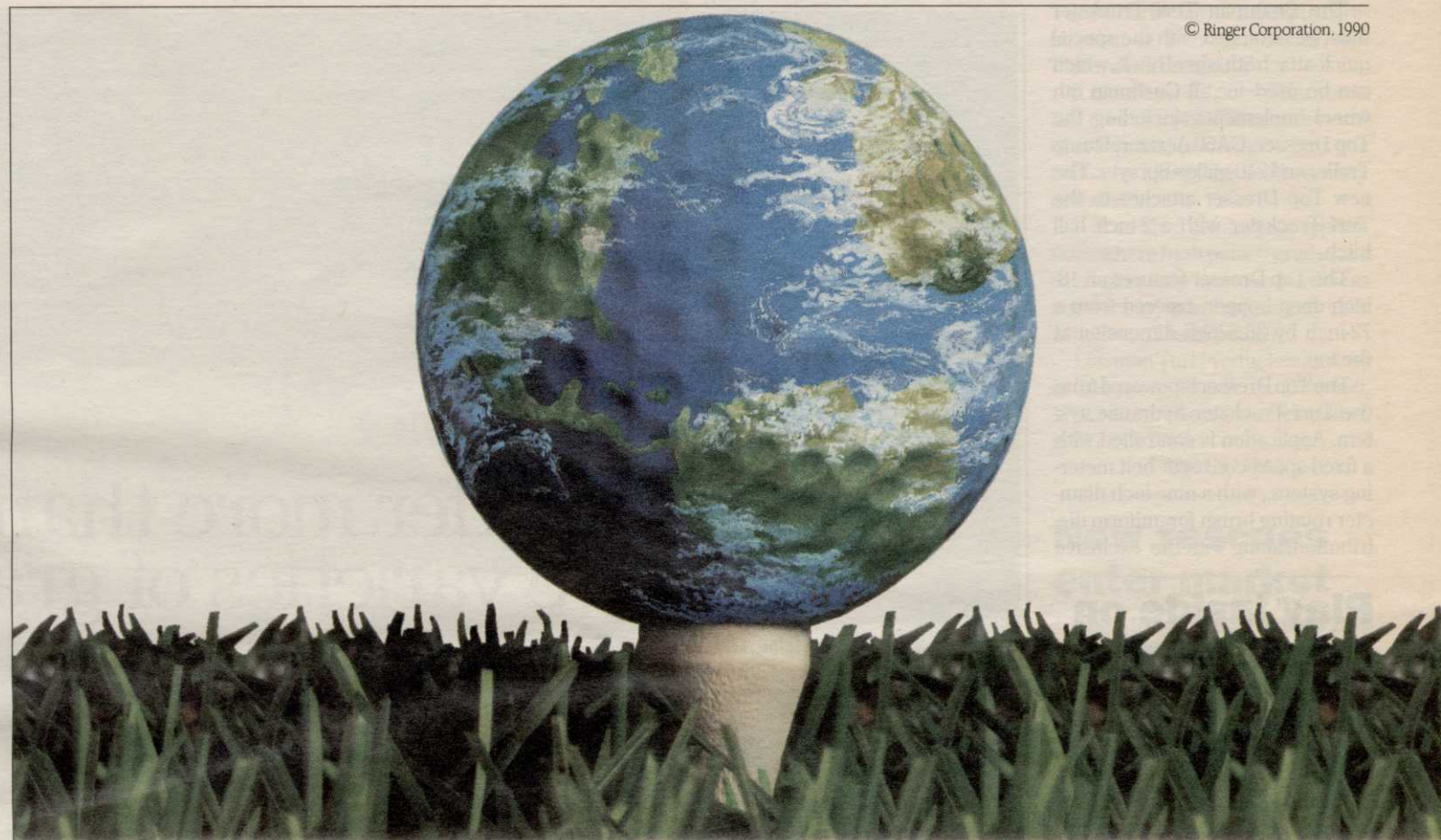
The new Neary reel sharpener Model 170 aligns a reel to within .002 of an inch, both vertically and horizontally. This one-time set-up is good for both spin and relief grinds.

Features include a fully pivoting winche. A precise dial indicator shows when a reel is accurately mounted and ready to sharpen.

The model is made of cast iron, with heavy-duty sealed ball bearings and industrial grade electronics. Contact Neary Manufacturing, 19228 Industrial Blvd., Elk River, Minn. 55330.

CIRCLE NO. 310

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Ringer will give your course a world of improvement.

Ringer Greens 6-1-3, Turf 10-2-6 and Greens Super 10-2-6 give you a whole new approach to greener greens, fairer fairways and tougher turf.

Natural protein, slow release nutrition. Ringer products use natural protein sources for slow-release nutrition without chemicals. Applied at recommended rates they will not burn.

More than a quick fix. Because they rely on a unique microbial action, Ringer products work by enhancing natural processes. Your course has a healthier environment. And it keeps getting better and better.



Scientifically formulated, environmentally sound. Greens 6-1-3, Turf 10-2-6 and Greens Super 10-2-6 were scientifically developed for professional use. They fit right in with your present program and strengthen your current disease control efforts.

Try Greens 6-1-3, Turf 10-2-6 and Greens Super 10-2-6 for a season on a problem green or fairway. You'll find that because they are environmentally sound, they improve the world a little as they improve your course a lot.

Call or write for details and the name of your distributor.

RINGER
Better, naturally



Ringer Corporation, 9959 Valley View Road, Minneapolis, MN 55344, 612-941-4180

CIRCLE #137/GCSAA BOOTH #1522

Cushman top dresser gives versatility

The new Cushman 5th Wheel Topdresser offers superintendents the flexibility of increased capacity for time-saving application, plus light enough ground pressure to use on greens and other high maintenance areas.

The new unit has a hopper capacity of 20.5 cubic feet or 2,500 pounds and a spreader width of 60 inches. The 5th wheel weight distribution puts only 11 psi ground pressure on the turf surface and only 10.5 psi for the Turf Truckster.

The Cushman Turf Truckster must be equipped with the special quick-attach 5th wheel hitch, which can be used for all Cushman 5th wheel implements, including the Top Dresser, GA60 Aerator, Dump Trailer and 240-gallon Sprayer. The new Top Dresser attaches to the Turf Truckster with a 2-inch ball hitch.

The Top Dresser features an 18-inch deep hopper, tapered from a 72-inch by 36.5-inch dimension at the top.

The Top Dresser is powered from the Turf Truckster hydraulic system. Application is controlled with a fixed-speed conveyor belt metering system, with a nine-inch diameter rotating brush for uniform distribution, along with the exclusive

Play inside on natural turf

The technology to install and maintain natural turf indoors is now available.

While primarily intended for ball fields, the Integrated Turf Management System from The Greenway Group could be used for indoor golf facilities or anywhere heavy traffic requires the regular replacement of turf, said Greenway group coordinator Thomas Ripley.

ITM provides a transportable natural turfgrass system, complete with a lightweight growing medium weighing a fraction of typical growing alternatives.

Also included are modular transport units. The 4- by 4-foot test units will likely be made out of high-density polyethylene, Ripley said.

Wear areas have traditionally been a problem on playing fields. ITM allows periodic replacement of wear areas with its transport unit.

"A superintendent called us the other day asking if ITM could be used to occasionally replace the turf on a driving range," Ripley said.

"It would be a simple matter to plant a transport unit in bentgrass and move it in to replace worn-out turf once in a while," Ripley said.

Contact The Greenway Group, P.O. Box 221, Horsham, Pa. 19044-0221; 215-343-0110.

CIRCLE NO. 313



Cushman 5th Wheel Top Dresser

Cushman ground speed governor control on the Turf Truckster.

Top Dresser tires are 24-inch by 13-inch turf tires on 12-inch rims.

Contact a Cushman dealer or write Cushman Inc., P.O. Box 82409, Lincoln, Neb. 68501; 1800-228-4444.

CIRCLE NO. 303

Sandoz hopes for EPA OK

Sandoz Crop Protection soon will offer turfgrass managers and lawn care professionals two more options for disease and weed control.

Barricade, a herbicide for turf and ornamental, and San619, a turf fungicide, are expected to receive EPA registration in 1991.

Barricade will be offered in a water dispersible granule for pre-emergent control of annual problem grasses.

San619 systematically controls a broad spectrum of major turf diseases, including dollar spot and

brown patch.

Barricade trials have shown a "long-lasting herbicide that provides season-long control of more than 70 weeds," said Dr. Tom Bregger, Sandoz technical product specialist. "Barricade will make controlling grasses easier because of its long residual, turf safety, low sustaining potential and unique application timing options."

It can be used on all established warm- and cool-season turfgrasses.

San619 has been found to have excellent control on 119 diseases. One important attribute is broad-spectrum control, specifically its effectiveness on brown patch.

Applied alone at a rate of 1/3 ounce per 1,000 square feet, San619 provides residual control of brown patch, gray leaf spot and summer patch for 21 to 28 days.

It also has proved effective on copper spot, rust, Southern blight, red thread and powdery mildew.

San619 first will be labeled for golf courses and sod farms.

Sandoz Crop Protection, based in Des Plaines, Ill., is a division of Sandoz Corp., the American subsidiary of Sandoz Ltd. of Basel, Switzerland, a multinational manufacturer of pharmaceutical, chemical, nutrition and agricultural products.

CIRCLE NO. 318

We offer more than 10 exclusive varieties of grass seed. But only one color.

At Scott we may offer a lot of exclusive seed varieties. But we have only one set of standards. The highest.

And those high standards begin with our breeding and varietal development. We not only work closely with universities and other seed developers, we have our own extensive in-house breeding program, with our own testing facilities all over the country.

The result? Seed to meet any requirement. Exclusive varieties like our Coventry, Abbey, Bristol and VICTA Kentucky bluegrasses; Accolade, Caravelle, Loretta, Applause and Ovation perennial ryegrasses; Banner Chewings fescue; and Chesapeake and Aquara tall fescues.

But seed development is only part of the story. We have

the most stringent requirements and controls for clean seed in the industry. From grower selection all the way through cleaning, testing and packaging, our standards are uncompromising. In fact, we pioneered the seed business over 100 years ago.

And only our seed comes equipped with a Scott Tech Rep. They're true agronomists, who can make recommendations and develop complete seeding and fertility programs to fit your specific needs and problems.

Of course, we still aren't content. We're constantly working harder to develop even better seed varieties.

Although you can rest assured, we're going to stick with the same old color.



COVENTRY • Abbey • Bristol • VICTA • Accolade • Caravelle
Loretta • Applause • Ovation • Banner • Chesapeake • Aquara

E-Z-GO rolls out its line of 1991 cars

E-Z-Go has introduced its 1991 Marathon Gas and Electric Golf Cars.

The first major manufacturer to offer a Solid State Emergency Control as standard equipment, E-Z-Go again will offer this technology as standard equipment.

Such control effects smoother "no lurch" acceleration and longer battery life, providing only the power desired or required, and increases the average number of commercial rounds between battery charges and reduces energy consumption

in the charging process by 25 per cent.

The 1991 gas car features a reliable 244cc, 2-cycle engine with an exclusive ground speed governor.

All 1991 cars feature a new, unbreakable sun canopy, auto-adjusting brakes, self-adjusting hill brake and double reduction rack and pinion steering.

Contact E-Z-GO Division of Textron, Inc., P.O. Box 388, Marvin Griffin Rd., Augusta, Ga. 30913-2699; 404-798-4311.

CIRCLE NO. 314

Jacobsen improves greens mower

Jacobsen's 19- and 22-inch walk-behind greens mowers are now easier to use and more durable.

A new brake has been added to both models. Used in conjunction with the transport wheels, it gives greater control on slopes, prevents runaways and holds the unit in place on a trailer.

Other refinements include an improved throttle handle and cable, an improved clutch that needs fewer adjustments, and a new differential that provides



Jacobsen greens mower

truer tracking of the mower.

Jacobsen's 2-inch Standard model is available with a 2- or 4-cycle engine. A quiet, 2-cycle engine powers the 19-inch Champi-

onship greens mower.

For more information contact Jacobsen Division of Textron, Inc., 1721 Packard Ave., Racine, Wis. 53403-2561.

CIRCLE NO. 305

CC fertilizer saves money

Lebanon Turf Products has introduced Country Club 7-3-22 with TEAM for use on fairways, tees and other professionally maintained turf areas.

This homogeneous fertilizer with 100 percent sulfate of potash is impregnated with 1.155 per cent TEAM herbicide — a unique combination of Benefin (Balan) and Trifluralin (Treflan).

It satisfies soils' potassium needs and provides pre-emergent control of crabgrass, goosegrass and poa annua by killing the seeds as they germinate.

It is an ideal product for applications where high potash grades are needed to help improve hardness and density, as well as in sandy soils which won't hold potash.

Lebanon Turf Products is located in Lebanon, Pa., P. O. Box 180, 17042-0180. The telephone number is 717-273-1685.

CIRCLE NO. 315

New fescues enter market

The Medalist Turf Products Division of NK Lawn & Garden Co. has introduced two new, improved tall fescue varieties: Amigo and Arriba.

These varieties will be blended with Arid tall fescue and offered the professional turf market as "The A-Team."

Each of the three grasses has excellent drought and heat tolerance, fine texture, pleasing color and many key low-maintenance characteristics. All have been ranked at or near the top in major categories of the USDA National Tall Fescue Trials.

Amigo and Arriba are dwarf cultivars and proprietary to NKL&G. Arid, a semi-dwarf tall fescue, is an exclusive variety for co-producers NKL&G and Jacklin Seed Company.

For more information, contact Joe Churchill, Product Manager, NK Lawn & Garden Co., Medalist Turf Division, P. O. Box 959, Minneapolis, Minn. 55440 or call 800-449-0956.

CIRCLE NO. 316

Blankets stop soil erosion

North American Green Inc. has added two erosion control blankets to its product line.

The DS75 and DS15 blankets combine a quick-degrading net with a 100-percent wheat straw matrix for superior erosion control and mulching where short-term protection is desired. The net decomposes in approximately 45 days.

North American Green is located at 14649 Highway 41 North, Evansville, Ind. 47711. 812-867-6632.

CIRCLE NO. 325

Toro markets larger deck

The Toro Company has introduced a 62-inch ProLine side discharge deck for mid-size walk-behind mowers.

The three-blade deck originally was designed for Toro's large Groundmaster mowing products.

"Cutters have been asking for a bigger deck for their mid-size, walk-behind mowers," said Jim Wallace, Proline marketing manager.

"Commercial cutters increasingly are mowing larger acreages. They want to increase productivity without adding more crews."

The new deck will cut 20 per

cent more grass than the standard 52-inch deck. It features counter-balance springs for improved deck flotation. Front and back anti-scalp rollers and an adjustable gauge wheel minimize scalping.

Cutting height can be adjusted without tools in half-inch increments from 1 to 4 inches.

The deck features a deep-wind tunnel housing for easier cutting and clipping dispersal in wet grass.

The recommended traction units for the 62-inch deck feature Kohler 14-hp, OHV command or 16-hp magnum twin cylinder engines.

Contact The Toro Co., ProLine Products, 8111 Lyndale Ave. South, Minneapolis 55420; 612-888-8801.

CIRCLE NO. 319

Murphy introduces new mixer

A patented soil blending and pulverizing machine has been introduced by Murphy Equipment Corp. of Oklahoma City, Okla.

The "Murphy's Growing Mixer" is totally portable when pulled by a half-ton pickup truck, and has a built-in turbo-charged diesel engine.

Materials are blended as they are processed, eliminating the need to pre-mix. As they are blended and pul-

verized, they also are fluffed, netting an additional 20 per cent in volume.

Processing materials at 100-200 cubic yards per hour, the mixer can reduce composting times of most materials, especially yard waste, to a maximum of six weeks. Pulverizing takes place inside the mill head, where heavy knives rotate at 1400 RPM.

Call 405-235-0155.

CIRCLE NO. 320

Rocket model sends water 40'

Barebo, Inc., has added a 10HP rocket model to its line of Otterbine floating surface spray mechanical aerators. The design achieves a spray height

of 40 feet. The detachable diffuser plate allows cleaning without removing it from the water. Call 215-965-6018.

CIRCLE NO. 321



Yamaha G5 Sun Classic golf car

New Yamaha golf car line introduced

Yamaha recently unveiled two new 1990 model golf cars, the GS Sun Classic and the G8 Fleet Classic.

The Sun Classic is constructed of a sturdy tubular steel frame and a body of durable Metton and SMC.

It features ample head, leg and entry room and a direct-flow ventilation system that cools passengers with roof and dashboard air vents.

Yamaha has included McPherson struts in front and three-link suspension as a standard feature.

Other standard features include headlights with high beams; tinted windshield; brake lights; front and rear bumpers; adjustable seats; horn; lighted instrument panel; locking glove compartment; behind-seat storage; and radial whitewall tires.

The G5-A Sun Classic is powered by an overhead valve, four-stroke engine. The G5-E is equipped with a 2.97-hp General Electric motor.

The G8 Fleet Classic comes with UltraPath three-link rear suspension providing golfers with better shock absorption and greater steering responsiveness.

It is available in two options.

The electric-powered G8-E has a Yamaha-designed and built PaceSetter solid-state speed controller that eliminates abrupt starts and ensures smooth acceleration. It regulates voltage to reduce battery power losses and increase vehicle range. It has a 2.97-hp motor.

The gas-powered G8-A is driven by an overhead valve, four-stroke engine, the first of its kind built exclusively for golf cars.

The unbreakable, corrosion-proof metton material body has been expanded to provide a longer wheel base and greater leg room. The bench seat is generously padded.

Standard features included quick-release, stand-up bag racks; score card holder; large double beverage holder; sweater basket; two golf ball holders; forward storage; and conveniently located forward/reverse knob. It comes with a comprehensive, three-year parts and labor warranty.

For more information write YAMAHA-USA, P.O. Box 6555, Cypress, Calif. 90630 or call 800-447-4700.

CIRCLE NO. 304

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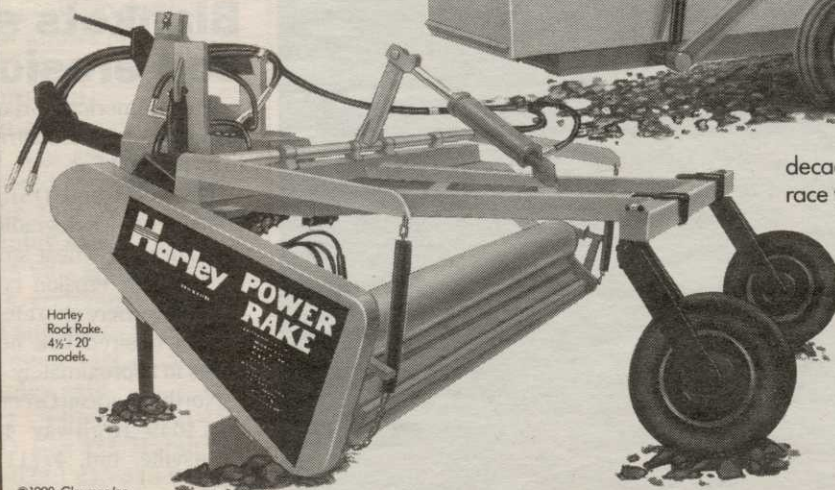


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CIRCLE #140

January

2-19 — Utility Turf Management/Home Lawn Care Management, at New Brunswick, N.J. Contact The Office of Continuing Professional Education at Cook College, 201-932-9271

3, 10, 17 — Selected Topics in Landscape Management, at New Brunswick, N.J. Contact The Office of Continuing Professional Education at Cook College, 201-932-9271.

3-4 — GCSAA seminar in St. Charles, Ill., on Environmental Management.*

3-March 8 — Rutgers Turfgrass Management Certificate Program, at New Brunswick, N.J. Contact The Office of Continuing Professional Education at Cook College, 201-932-9271.

6-8 — Minnesota Nursery and Landscape Association Convention and Trade Show in Minneapolis, Minn. Contact MNLA at 612-633-4987.

6-10 — Golf Course Association's Ninth Annual Conference at the Registry Hotel in Naples, Fla. Contact the GCA at 8030 Cedar Ave., Suite 228, Minneapolis, Minn. 55425; 612-854-8482.

7-8 — GCSAA seminar in Birmingham, Ala., Weed Control.*

7-9 — 25th Annual Tennessee Turfgrass Conference and Show at the Holiday Inn World's Fair in Knoxville, Tenn. Contact Donnie Callis, executive secretary, Tennessee Turfgrass Association, 533 Hagan St., Nashville, Tenn. 37203; 615-242-4600.

7-9 — 29th Annual Nebraska Turfgrass Conference at Holiday Inn Central, Omaha, Neb. Contact Don Ellerbee, Nebraska Turfgrass Foundation, 2727 W. Second St., P.O. Box 2118, Hastings, Neb. 68902-2118; 402-463-5418.

7-10 — 45th Annual Northeast Weed Science Society Meeting at Stouffer Harborplace Hotel in Baltimore, Md. Contact Bradley Majek at 609-455-3100.

7-10 — Virginia Professional Horticultural Conference and Trade Show in Virginia Beach. Contact show headquarters at 804-465-7777.

7-11 — Fifth Annual Ohio State University Golf Course Maintenance Short Course at Parke Hotel in Columbus, Ohio. Contact Sue White at 614-292-7457 for course content, or the Department of Conferences and Institutes at 614-292-4230 to register.

8-9 — Sixth Annual Wisconsin Turfgrass Association Winter Conference at the Olympia Village Resort in Oconomowoc. Contact Ed Devinger, Reinders Brothers, Inc., 13400 Watertown Plank Road, Elm Grove, Wis. 53122; 414-786-3301.

8-11 — Eastern Pennsylvania Turfgrass Conference and Trade Show at Valley Forge Convention Center, King of Prussia, Pa. Contact the Pennsylvania Turfgrass Council, Landscape Management Research Center, Orchard Road, University Park, Pa. 16802; 814-863-3475.

9 — GCSAA seminar in the Washington, D.C., area on Developing Your Hazard Communication Program.*

9 — Lambert Landscape Co.'s Organic Warehouse and Soil Management Services will host its third annual Organic Landscaping and Growing Seminar in Dallas, Texas. It will cover environmental problems, basic organic programs, conversion from chemical to organic, organic pest control, soil balancing and other topics. Contact Barbara Smith at Lambert Landscape, telephone 214-239-0121.

9-11 — 29th Annual North Carolina Turfgrass Conference and Exhibit, Charlotte, N.C. Contact A.H. Bruneau, Box 7620, North Carolina State University, Raleigh, N.C. 27695-7620; 919-737-2326.

10-11 — New Hampshire Turf Conference

at the Center of New Hampshire in Manchester. Contact Tom Rowell, 5 Echo Ave., Portsmouth, N.H. 03801.

10-11 — GCSAA seminar in Pittsburgh, Pa., on Golf Course Restoration, Renovation and Construction Projects.*

10-12 — The 21st Annual Georgia Turfgrass Conference and Trade Show at the Georgia International Convention and Trade Center in Atlanta. Contact Conferences, Box 8112, Georgia Southern University, Statesboro, Ga. 30460; 912-681-5189.

13-18 — National Golf Foundation-National Institute of Golf Management at Oglebay Park, W.Va. Contact Oglebay at 304-243-4027.

14-15 — GCSAA seminar in Cromwell, Conn., on Disease Identification and Control.*

14-17 — 31st Virginia Turfgrass Conference and Trade Show at the Richmond Centre and

Richmond Marriott Hotel. Contact Randeem Tharp at 804-340-3473.

15-17 — North Central Turfgrass Association Conference and Trade Show in Fargo, N.D. Contact NCTGA at 701-232-0215.

16 — Professional Turf and Landscape Conference and Trade Show in White Plains, N.Y. Contact New York Turf and Landscape Association at 914-636-2875.

17-19 — 1991 Mid-America Horticultural Trade Show at the Hyatt Regency Chicago. Sponsored by the Illinois Nurserymen's Association, Illinois Landscape Contractors Association, and Wisconsin Landscape Federation, the show is endorsed by the Indiana Association of Nurserymen and the Iowa Nurserymen's Association. Contact Mid-Am Trade Show, 1000 N. Rand Road, Suite 214, Wauconda, Ill. 60084; 708-526-2010.

20-23 — Landscape Magic 91 in Lake Buena Vista, Fla. Contact Walt Disney World Seminar Productions at 407-363-6620.

21-23 — The 61st Annual Michigan Turfgrass Conference at Clarion Hotel and Conference Center in Lansing, Mich. Contact Michael Saffel, 584G Plant and Soil Sciences Building, Department of Crop and Soil Sciences, Michigan State University, East Lansing, Mich. 48824; 517-353-9022.

21-23 — Midwest Regional Turf Conference and Trade Show at Adam's Mark Hotel & Conference Center, Indianapolis, Ind. Contact Jeff Lefton, Agronomy Department, Purdue University, West Lafayette, Ind. 47907; 317-494-9737.

22 — Golf Course Superintendents Association of New England annual meeting at

Continued on page 50

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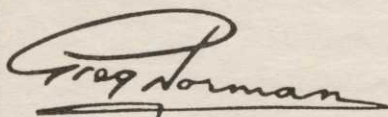
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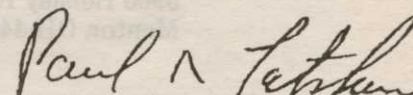
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Greg Norman


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CIRCLE #142/GCSAA BOOTH #3800

Continued from page 49

Blue Hill Country Club in Canton, Mass. Contact President Paul Miller, 1 Leicester Road, Marblehead, Mass. 01945; 508-369-5704.

22-23 — Fifth Annual Inland Northwest Turf and Landscape Conference and Trade Show at the Spokane-Sheraton and the Spokane (Wash.) Convention Center. The event is sponsored by Washington State University Cooperative Extension and the Inland Empire Golf Course Superintendents Association. Contact Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, Wash. 99201-2261; 509-327-5904.

23 — Arizona Spring Nursery and Landscape Show in Phoenix. Contact show producers at 916-488-6434.

24-26 — Idaho Horticultural Convention and Trade Show in Boise, Idaho. Contact

Idaho Nurserymen's Association at 800-462-4769.

25 — Annual Mid-Florida Turfgrass Conference at Seminole Community College in Sanford. Contact the University of Florida Cooperative Extension Service, Uday K. Yadav, 407-323-2500, ext. 5559.

25-28 — PGA Merchandise Show in Orlando, Fla. For information call 800-283-GOLF.

29-30 — Ohio State University Athletic Fields/Sportsturf Seminar at Parke Hotel in Columbus, Ohio, emphasizing principles of agronomy, soils, entomology and plant pathology. Contact Sue White at 614-292-7457 for course content, or the Department of Conferences and Institutes at 614-292-4230 to register.

30-Feb. 1 — International Society of Arboriculture Conference in Oklahoma City,

Okla. Contact convention organizers at 918-622-7513.

31 — Southern California Spring Horticultural Trade Show in Pomona, Calif. Contact show producers at 916-488-6434.

February

5-12 — 62nd Annual International Golf Course Conference and Show, sponsored by the Golf Course Superintendents Association, in Las Vegas, Nev. Contact the GCSAA at 1617 St. Andrews Drive, Lawrence, Kansas; 913-841-2240.

6-7 — Garden State Nursery and Landscape Conference and Trade Show in Somerset, N.J. Contact the New Jersey Nursery and Landscape Association at 609-737-0890.

15-16 — Association of Professional Landscape Designers Annual Meeting and Sym-

posium in Bethesda, Md. Contact Environmental Design at 301-652-1212.

19-21 — Northeastern Pennsylvania Turfgrass and Grounds Maintenance School in Nanticoke. Contact William Pencek at 717-963-4761.

21 — Pennsylvania Golf Course Owners executive board meeting in Monroeville. Contact President Carol Nill at 1322 Penhurst Drive, McKeesport, Pa. 15135; 412-751-0852.

21-22 — Landscape Industry Conference and Trade Show in Denver, Colo. Contact Associated Landscape Contractors of Colorado at 303-425-4862.

22-23 — American Landscape Maintenance Association Expo in St. Petersburg, Fla. Contact ALMA at 800-992-ALMA.

26-27 — Irrigation Part I seminar, sponsored by GCSAA, in Seattle, Wash.*

26-28 — Western Pennsylvania Turf Conference and Trade Show in Monroeville. Contact the Pennsylvania Turfgrass Council at 814-863-3475.

28-March 1 — GCSAA seminar in Cincinnati, Ohio, on Landscape Design and Materials.*

March

10-12 — Ohio State Golf Course Owners Conference in Akron. Contact Allan Whaling at 614-889-1593.

12 — Seminar on Recent Developments in Turfgrass Disease and Control by Dr. Houston Couch in Edmonton, Alberta, Canada. Contact the Canadian Golf Superintendents Association, 203-2000 Weston Road, Weston, Ontario M9N 1X3; 800-387-1056.

12-13 — GCSAA seminar in Philadelphia, Pa., on Environmental Considerations in Golf Course Management.*

13-14 — Reinders Brothers, Inc.'s 10th Turf Conference, Equipment Show and Service Clinic at Waukesha (Wis.) Expo Center. Contact Ed Devinger at 13400 Watertown Plank Road, Elm Grove, Wis. 53122; 414-786-3301.

15 — Seminar, "Update on Pesticides and Spraying Calibrations," by Dr. Chris Hall in Hamilton, Ontario, Canada. Contact the Canadian Golf Superintendents Association,

Continued on page 52



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CIRCLE #172

Continued from page 50

203-2000 Weston Road, Weston, Ontario M9N 1X3; 800-387-1056.

18-19 — GCSAA seminar in Minneapolis, Minn., on Public Relations and Public Speaking.*

21 — GCSAA seminar in Milwaukee, Wis., on Safe Pesticide Management.*

24 — Seminar on Soil Modifications in Montreal, Quebec, Canada, by Dr. Donald Waddington. Contact the Canadian Golf Superintendents Association, 203-2000 Weston Road, Weston, Ontario M9N 1X3; 800-387-1056.

25-26 — GCSAA seminar in Indianapolis, Ind., on Integrated Pest Management.*

April

11-14 — Golf Asia '91, the first international golf show for the Asia-Pacific region, at the World Trade Centre in Singapore. Contact Zainal Abidin Shah, exhibition manager, at Connex Private Ltd., 3015A Ubi Road 1 #05-11/12, Kampong Ubi Industrial Estate, Singapore 1440; telephone 7489696.

16-17 — GCSAA seminar in Palm Springs, Calif., on Disease Identification and Control.*

18-19 — Landscape Industry Show/Greentech 91 in Long Beach, Calif. Contact California Landscape Contractors Association at 916-448-2522.

22-24 — Golf Development Expo in Palm Springs, Calif. Contact Crittenden Research Institute, Inc., P.O. Box 1150, Novato, Calif. 9448; 800-443-8318.

July

28-30 — International Lawn, Garden and Power Equipment Expo 91 in Louisville, Ky. Contact Expo Hot Line at 800-558-8767.

August

7 — Illinois Landscape Contractors Association Summer Field Day in St. Charles, Ill. Contact ILCA at 708-932-8443.

8 — MNLA Summer Meeting and Trade Show in St. Paul, Minn. Contact Minnesota Nursery and Landscape Association at 612-633-4987.

16-18 — TAN-MISSLARK Regional Nursery and Garden Supply Show in Dallas. Contact Texas Association of Nurserymen at 512-280-5182.

25-27 — National Lawn, Garden and Power Equipment Showcase in Toronto, Ontario, Canada. Contact show producers at 705-741-2536.

September

1-3 — International Garden Trade Fair in Cologne, Germany. Contact show producers at 212-974-8836.

13-15 — Florida Nursery and Allied Trades Show in Orlando, Fla. Contact FNGA at 407-345-8137.

15-17 — GMA Show-International Professional Lawn, Garden and Outdoor Power Equipment Exhibition in Kempton Park, United Kingdom. Contact Andry Montgomery Group at 502-473-1992.

16-19 — Northwest Turfgrass Conference and Exhibition in Couer d'Alene, Idaho. Contact NTA at 206-754-0825.

November

5-6 — Indiana State Lawn Care Association Conference and Show in Indianapolis. Contact ISLCA at 317-575-9010.

5-8 — New York State Turfgrass Association Turf and Grounds Exposition in Rochester, N.Y. Contact NYSTA at 800-873-TURF.

10-13 — International Irrigation Exposition in San Antonio, Texas. Contact The Irrigation Association at 703-524-1200.

14-16 — Landscape Maintenance Association Meeting and Demo at a site to be

Continued on page 53

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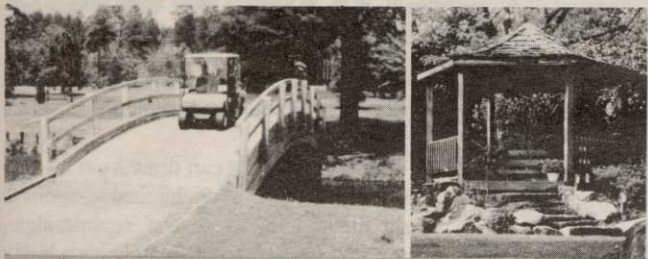
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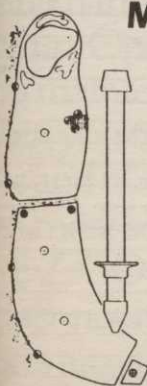


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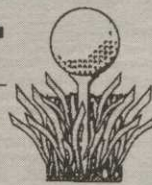
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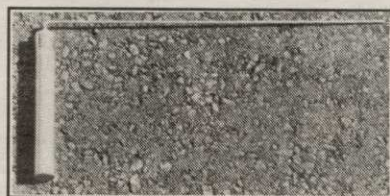
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CALENDAR

Continued from page 52

announced. Contact LMA at 813-584-2312.

17-20 — Green Industry Expo in Tampa,
Fla. Contact Associated Landscape Contrac-
tors of America at 703-241-4004.

18-21 — Professional Lawn Care Associa-
tion of America Convention and Trade Show
in Tampa, Fla. Contact PLCAA at 404-977-
5222.

19-21 — Inland Northwest Turf and Land-
scape Conference and Trade Show in Spo-
kane, Wash. Contact show producers at 800-
729-5904.

December

3-4 — Southern Grounds and Turf Main-
tenance Expo in Myrtle Beach, S.C. Contact
show producers at 800-553-7702.

9-12 — Ohio Turfgrass Conference and
Trade Show in Cincinnati. Contact Ohio
Turfgrass Foundation at 614-292-2601.

* — For more information or to register,
contact Betsy Evans, education coordinator,
Golf Course Superintendents Association of
America, at 800-472-7878 or 913-841-2240.
The seminars are dependent upon the avail-
ability of the instructors, and are therefore
subject to change. One-day seminars cost \$100
for GCSAA members and \$120 for non-mem-
bers; two-day seminars cost \$180 for members
and \$210 for non-members.

Sheaffer

Continued from page 54

ganic fertilizer for the next algae crop. Fur-
thermore, this decomposition uses up a lot of
oxygen. Once all the oxygen is gone, decom-
position goes anaerobic and that releases the
methane and sulfur gasses that smell so bad.

"Properly employed, aeration alone can
cut down on odors by keeping dissolved
oxygen levels high enough to prevent
anaerobic decomposition. But aeration does
nothing to affect the levels of dissolved nutri-
ents that feed successive algae blooms. Aera-
tion can beat the water severely enough to
prevent green filamentous algae growth. But
it can't stop the blue-green algae that stay
suspended throughout the pond and contrib-
ute to a dark, murky appearance.

"Important for sewage treatment water is
the high levels of chlorine and other salts.
These cause grass damage when this water is
used for irrigation. Neither aeration nor
chemicals can remove these salts."

Sheaffer explained that his system, "re-
stores and renews the water by oxidizing
harmful organics and nutrients that build up
otherwise. It also oxidizes out salts like chlo-
rine. The activated oxygen destroys the ele-
ments that lead to so many problems.

"Additionally, we supply aeration at the
bottom to raise dissolved oxygen levels.
This prevents odors associated with
anaerobic decomposition and keeps nutri-
ents tied up in the bottom sediments. In-
stead of killing algae blooms, we keep the
nutrient levels low enough to prevent them
from ever occurring. We work to restore
water by creating a true ecological balance.
That includes plants, fish, plankton, etc."

Sheaffer said he has installed the system
on a dozen courses, primarily in California
and Arizona. The cost has ranged from
\$5,000 for a one-acre pond to \$120,000 for a
325-acre lake.

Hurdzan said the installation and \$80 to
\$100 per year maintenance costs are "very
reasonable." It also uses less electricity
than other systems, he added.

"In all honesty, there's no other treatment
method I have seen that is as effective, and
as cost effective, as the Sheaffer System,"
Alderman said.

Chris Loynd is a writer based in Milford, Conn.

Sheaffer combines best of two technologies

New aeration system tackles wastewater with ease, efficiency

By Chris Loynd

David Harms was concerned when he heard the new Tustin Ranch Golf Course would be supplied by water from a treatment plant.

"Reclaimed water is great because it lessens demand on the domestic supply," said the Yorba Linda, Calif., builder. "We've built a lot of courses that have reclaimed water. There's always a multitude of problems. The water is so salty it kills the grass. Or there's a slime build up on the water surface and it floats over the shoreline. You can get all kinds of real bad situations."

But Jeff Alderman of Alderman Engineering, who designed the Tustin, Calif. course's three effluent-filled lakes, convinced the developer, The Irvine Co., to try a relatively new water treatment system. The system sends activated oxygen into the water through leaded air lines along the lake bottom.

How effective is the R.C. Sheaffers Co.-designed system?

"The water quality has been great," said Harms. "I've never seen a reclaimed water situation work so well."

How does it work?

Drawing on technologies from the water treatment and pool and spa industries, the system uses activated oxygen and aeration, carefully proportioned and then diffused into water at the lake bottom, said Ron Sheaffer, president of the Sandwich, Ill. company that designed the system five years ago.

Systems are custom designed for each lake or pond application. Activated oxygen is produced on site from oxygen and water vapor present in ambient air by passing the air over special lamps. Activated oxygen



The waterfall at Tustin Ranch Golf Course.

'Aeration alone can cut down on odors by keeping dissolved oxygen levels high enough to prevent anaerobic decomposition. But aeration does nothing to affect the levels of dissolved nutrients that feed successive algae blooms.'

— Ron Sheaffer

contains some of the most powerful oxidizing agents available.

All necessary equipment, lamps and compressor, are placed in a small shed or underground vault. The system requires little pressure. Electricity use and maintenance are lower than aeration systems for a comparable-sized pond.

"An important quality of these powerful short-lived oxidizing agents is that they convert back into oxygen and water, leaving no harmful residuals or toxic buildup," Sheaffer

said.

The system is particularly effective where effluent is used for irrigation, an increasingly common situation with water shortages cropping up across the country.

Two of Tustin Ranch's lakes are 4-1/2 acres. The third is just under an acre. One of the larger lakes feeds the course irrigation system of 2,000 sprinkler heads. That lake is drawn down anywhere from 200,000 to its maximum capacity of 800,000 gallons per day to supply the sprinklers.

"Clarity in the two self-contained lakes has been excellent," said superintendent Steve Plummer. "You can see six to eight feet from the bank to the bottom. The irrigation lake isn't quite as clear because it keeps getting replenished by reclaimed water. There's probably a four-foot-deep visibility from the bank. But there has been no odor and minimal surface scum and nuisance algae on it, or on any of the lakes."

The system has attracted attention from area superintendents and developers, said Alderman.

"We're getting calls about other golf course lakes where they're using effluent water and having some real problems. There are serious concerns when using sewage water in lakes that don't have an activated oxygen system. Number one, they smell. Second, they're a health nuisance. But most importantly, these lakes don't fulfill their original mission, to add aesthetic value and beauty to the golf course," Alderman added.

Said golf course architect Michael Hurdzan: "The system makes good sense. It's only possible drawback would be if a lake has a lot of sediment. Then you might have to raise the line."

Chemicals, aerators unnecessary

From a design standpoint, all artificial lakes and ponds work against nature.

"Most have no water flow in or out of the lake," said Sheaffer. "Some may have a pump, waterfall or aerator. But these only turn over

the same water. Even a swamp has more water flow with a periodic replenishing of old water with new.

"Superintendents can draw from an arsenal of chemical and mechanical weapons to fight the annual water war against algae, scum and odors. Unfortunately it's a losing battle because none of the available chemicals, dyes, aerators, paddles or pumps adequately address the root causes of eutrophic lakes and ponds.

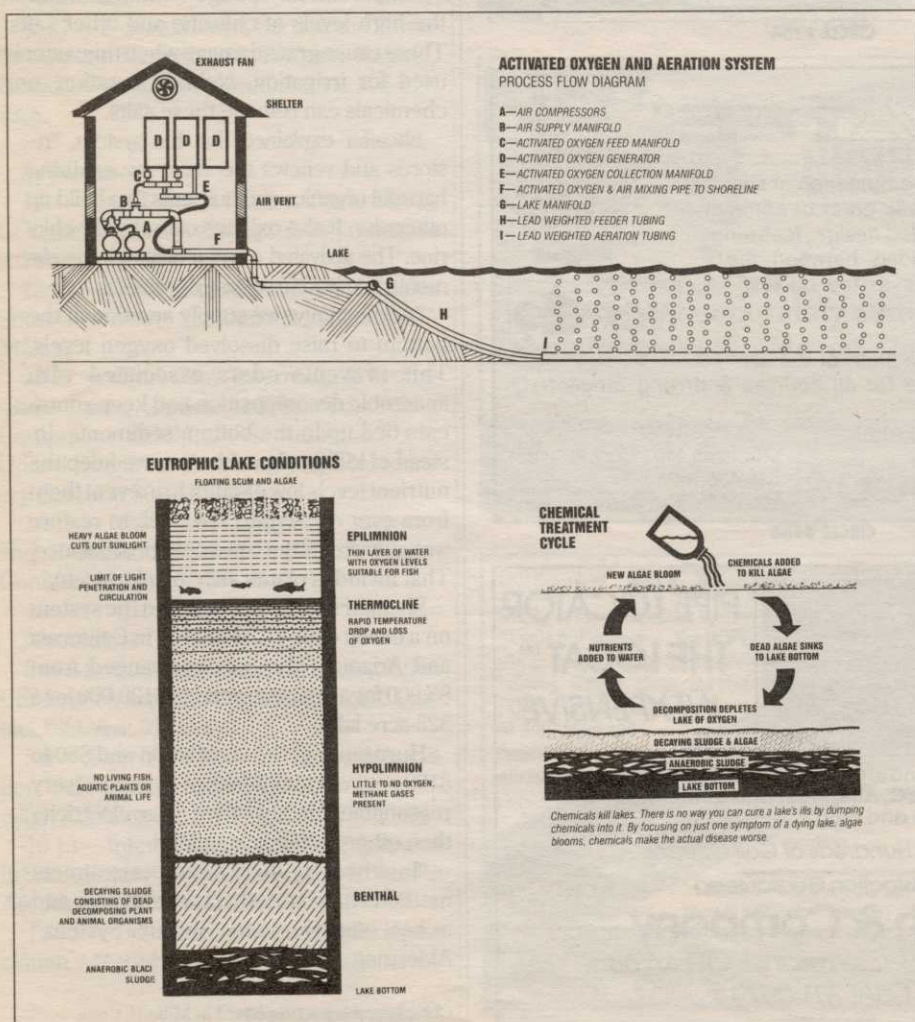
"It's high levels of dissolved nutrients and low levels of dissolved oxygen that cause all the problems superintendents face. Water flow in a natural body of water flushes out nutrients and replenishes oxygen. In a golf course lake you can't generally do this.

"Unfortunately the first step by most superintendents is to use chemicals to kill nuisance algae blooms. However, chemical treatments only re-release nutrients trapped in the algae back into the water. As it decomposes, the rotting algae basically acts as or-

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